

# *Selected Production of Hannu Saarenmaa*

<i>Year</i>	<i>Title</i>	<i>Refereed</i>	<i>Format</i>	<i>Author</i>	<i>Platform</i>	<i>Reference</i>	<i>Publisher</i>	<i>Source</i>
2006	The global cyberinfrastructure for biodiversity data sharing.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	Symposium on National Biodiversity and Ecosystem Information Infrastructure: Challenges and Potentials, NCL, Pune, India, 2006-		National Chemical Laboratory, Pune, India.	<a href="http://circa.gbif.net/Public/irc/gbif/ict/library?l=/presentations/pune_v0_dr aft_ppt/">http://circa.gbif.net/Public/irc/gbif/ict/library?l=/presentations/pune_v0_dr aft_ppt/</a>
2005	GBIF:n tavoitteet, toiminta ja merkitys jäsenmaille.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	Luonnontieteelliset museopäivät. Jyväskylä 3-4.10.2005.		Suomen Museoliitto, Helsinki.	<a href="http://circa.gbif.net/Public/irc/gbif/ict/library?l=/presentations/museopaivatgbif/">http://circa.gbif.net/Public/irc/gbif/ict/library?l=/presentations/museopaivatgbif/</a>
2005	Sharing and accessing biodiversity data globally through GBIF.	<input type="checkbox"/>	Published article	Saarenmaa, H.	25th Annual ESRI International User Conference, San Diego, 25-29 July 2005.	Arc User (in print) 8 p.	Environmental Systems Research Institute, Redlands, California.	<a href="http://gis.esri.com/library/userconf/proc05/abstracts/a1310.html">http://gis.esri.com/library/userconf/proc05/abstracts/a1310.html</a>
2005	The network of the Global Biodiversity Information Facility as model for GISIN (Global Invasive Species Information Network).	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	AAAS 2005 Annual Meeting, February 17-21, 2005, Washington, DC.		The American Association for the Advancement of Science, Washington,	<a href="http://www.gisnetwork.org/aaasymposium.htm">http://www.gisnetwork.org/aaasymposium.htm</a>
2005	Use and functions of GBIF UDDI registry.	<input type="checkbox"/>	Manuscript, slides	Ksouris, G. & Saarenmaa, H.	Taxonomic Databases Working Group, Annual Meeting, 11-17 October 2004, Christchurch, New Zealand	13 p.		
2004	Data sharing through the network of the global biodiversity information facility using web services.	<input type="checkbox"/>	Abstract, slides	Badescu, M. & Saarenmaa, H.	EnvirolInfo 2004, CERN, Geneva, Switzerland, October 21-23, 2004.			
2004	GBIF Data Portal Strategy.	<input type="checkbox"/>	Report	Hobern, D. & Saarenmaa, H.		40 p.	Global Biodiversity Information Facility, Secretariat, Copenhagen.	<a href="http://circa.gbif.net/Public/irc/gbif/dadi/library?l=/architecture/portal_strategy_1/">http://circa.gbif.net/Public/irc/gbif/dadi/library?l=/architecture/portal_strategy_1/</a>
2004	GBIF Data Repository Tool. Data warehouse tool for hosting and sharing biodiversity datasets.	<input type="checkbox"/>	Data product	Saarenmaa, H. & Chirila, D.	Zope, Python, MySQL. Version 1.0, 1 March 2003, Version 2.0, November 2004.		GBIF Secretariat, Copenhagen.	<a href="http://www.gbif.org/serv/gbif-tools">http://www.gbif.org/serv/gbif-tools</a>
2004	Global initiatives to coordinate the exchange of accurate biodiversity information related to systematics and national biological inventories,	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	28th NAPPO Annual Meeting, Vancouver, BC, Canada, 18-22 October 2004.			<a href="http://www.nappo.org/annualmtg/AnnualMtgHighlights/2004Highlights.htm">http://www.nappo.org/annualmtg/AnnualMtgHighlights/2004Highlights.htm</a>
2004	Kokeita pakastavalla valorysällä.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.				<a href="http://www.bioshare.net/Stories/pakas/">http://www.bioshare.net/Stories/pakas/</a>

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2004	Pallas-Ounastunturin kansallispuiston perhos- ja vesiperhosselvitys.	<input type="checkbox"/>	Report	Sundell, P.R., Nupponen, K., Nieminen, M., Itämies, J., Saarenmaa, H.,		83 s.	Metsähallitus ja Faunatica Oy, Espoo.	
2004	The Global Biodiversity Information Facility and GISIN.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Sellers, E., Simpson, A., Fisher, J.P. & Curt-Hedrick, S. Experts meeting on implementation of a Global Invasive Species Information	55-61.	National Biological Infrastructure, U.S. Geological Survey,	<a href="http://invasivespecies.nbi.gov/as/GISIN/Proceedings%2004.pdf">http://invasivespecies.nbi.gov/as/GISIN/Proceedings 2004.pdf</a>
2003	GBIF node requirements and recommendations.	<input type="checkbox"/>	Report	Saarenmaa, H. & Hobern, D.		16 p.	GBIF Secretariat, Copenhagen	<a href="http://circa.gbif.net/Public/irc/gbif/nodes/library?l=/specifications/noderequirements/">http://circa.gbif.net/Public/irc/gbif/nodes/library?l=/specifications/noderequirements/</a>
2003	Reportnet. Electronic infrastructure and tools for streamlining flows of environmental information in Europe.	<input type="checkbox"/>	Brochure	Anon.		8 p.	European Environment Agency, Copenhagen.	
2002	Development of common tools and a shared information infrastructure for the European Environment Information System.	<input type="checkbox"/>	Published article	Saarenmaa, H., Martin, J., Jensen, S., Peifer, H. & McInnes, G.		Technical Reports Vol. 83, 36 p.	European Environment Agency, Copenhagen.	<a href="http://reports.eea.eu.int/technical_report_2002_83/">http://reports.eea.eu.int/technical_report_2002_83/</a>
2002	Infrastructure and tools for a European Environmental Information System - The contribution through Reportnet.	<input type="checkbox"/>	Published article	Jensen, S., Saarenmaa, H. & Martin, J.	Pillman, W., Tochtermann, K. (eds.) Environmental communication in the information society. Proceedings of the 16th Conference "Informatics and	10 p.	International Society for Environmental Protection.	
2002	Reportnet. Shared information infrastructure for environmental reporting in Europe.	<input type="checkbox"/>	Data product	Jensen, S., Saarenmaa, H., Roug, S., Peifer, H., Heinlaid, J., Palosuo, E. &	Java, MySQL.		European Environment Agency, Copenhagen.	<a href="http://dd.eionet.eu.int/">http://dd.eionet.eu.int/</a> , <a href="http://rod.eionet.eu.int/">http://rod.eionet.eu.int/</a> , <a href="http://cdr.eionet.eu.int/">http://cdr.eionet.eu.int/</a> , <a href="http://cr.eionet.eu.int/">http://cr.eionet.eu.int/</a>
2002	World Wide Web site of the Global Biodiversity Information Facility.	<input type="checkbox"/>	Data product	Vizitiu, C., Ksouris, G. & Saarenmaa, H.	Zope, Python, LDAP. Started 1 December 2002.		GBIF Secretariat, Copenhagen.	<a href="http://www.gbif.org/">http://www.gbif.org/</a>
2001	Content management at the European Community Clearing-House Mechanism Portal.	<input type="checkbox"/>	Abstract, slides	Bulandra, M., Iannucci, C., Nitu, C. & Saarenmaa, H.	Klingl, T. (Editor). Providing environmental web services. CDS e-EIONET Work Conference, Thun, Switzerland, 6-9 October 2001.			<a href="http://www.eionet.eu.int/events/cdsittag2001/abstracts/bula.htm">http://www.eionet.eu.int/events/cdsittag2001/abstracts/bula.htm</a>
2001	e-EIONET the platform for environmental reporting in the Accession Countries.	<input type="checkbox"/>	News article	Blagoev, S. & Saarenmaa, H.		Phare CORINE /EEA Newsletter 11: 8-9. May 2001.	European Commission, Brussels.	
2001	Management of Environmental Information in the European Information and Observation network (EIONET).	<input type="checkbox"/>	Published article	Pick, T., Saarenmaa, H. & Lounamaa, K.	Oyama, K. & Gotoda, H. DC-2001. Proceedings of the International Conference on Dublin Core and Metadata Applications 2001.	109-114.	National Institute of Informatics, Tokyo, Japan.	<a href="http://www.nii.ac.jp/dc2001/proceedings/product/paper-19.pdf">http://www.nii.ac.jp/dc2001/proceedings/product/paper-19.pdf</a>

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2001	New face for EIONET in a new millennium.	<input type="checkbox"/>	News article	Saarenmaa, H.		IDA Report 11, 4.	European Commission, Brussels.	
2001	Shaping the Reportnet.	<input type="checkbox"/>	News article	Jensen, S. & Saarenmaa, H.		EIONET News 8: 1.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/EIONE_T8.pdf">http://www.eionet.eu.int/docu/newsletter/EIONE_T8.pdf</a>
2001	Technological opportunities and challenges in building a global biological information infrastructure.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Saarenmaa, H. & Nielsen, E. (Editors) Towards a global biological information infrastructure: challenges, opportunities, synergies,	Technical Reports Vol. 70: 60-72.	European Environment Agency, Copenhagen.	<a href="http://reports.eea.eu.int/technical_report_2001_70/">http://reports.eea.eu.int/technical_report_2001_70/</a>
2001	Tools for Reportnet are evolving.	<input type="checkbox"/>	News article	Palosuo, E. & Saarenmaa, H.		EIONET News 8: 3-4.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/EIONE_T8.pdf">http://www.eionet.eu.int/docu/newsletter/EIONE_T8.pdf</a>
2001	Towards a shared European environmental information infrastructure.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Hilty, L.M. & Gilgen, P.E. (Editors) Sustainability in the Information Society. Environmental Informatics 2001. 15th International Symposium	411-418.		<a href="http://www.eionet.eu.int/EIONET_Collaboration/ui01-eeii">http://www.eionet.eu.int/EIONET_Collaboration/ui01-eeii</a>
2000	Biotella. Biological data collection application for personal computers.	<input type="checkbox"/>	Data product	Saarenmaa, H.	Microsoft Access and Visual Basic.			<a href="http://www.bioshare.net/serv/download/biotella">http://www.bioshare.net/serv/download/biotella</a>
2000	EC-CHM. Portal of the European Community Clearing-House Mechanism under the Convention on Biological Diversity.	<input type="checkbox"/>	Data product	Pinborg, U. & Saarenmaa, H.	Zope, MySQL. Started 14 May 2000		European Environment Agency, Copenhagen.	<a href="http://biodiversity-chm.eea.eu.int/">http://biodiversity-chm.eea.eu.int/</a>
2000	Fuusio.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsänhoitaja 4/00: 23-24.		<a href="http://www.metsanhoitajat.fi/mh-lehti/mhlehti_400.htm">http://www.metsanhoitajat.fi/mh-lehti/mhlehti_400.htm</a>
2000	Groupware at EEA.	<input type="checkbox"/>	Slides	Saarenmaa, H.	Delphi e-Business Summit. Coronado, California 7-10 May 2000.			<a href="http://www.delphigroup.com/events/e-business-summit/ebusiness-summit-">http://www.delphigroup.com/events/e-business-summit/ebusiness-summit-</a>
2000	Macrolepidoptera survey at the Kungsmarken nature reserve.	<input type="checkbox"/>	Report	Saarenmaa, H.		12 p.	Länstyrelsen i Skåne län, Malmö.	<a href="http://www.bioshare.net/Stories/kungsmarken1999report">http://www.bioshare.net/Stories/kungsmarken1999report</a>
2000	Metsätietojärjestelmien läpimurto Rovaniemen tutkimusasemalla.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Annanpalo, H. (toim.) Kriisien hallinnasta kestävään monikäyttöön. Rovaniemen tutkimusasema 1970-2000.	Metsäntutkimuslaitoksen tiedonantoja 767: 71-76.		

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2000	Present status and the next steps of European Community Clearing-House Mechanism.	<input type="checkbox"/>	News article	Pinborg, U. & Saarenmaa, H.		EC-CHM Newsletter 2.	European Environment Agency, Copenhagen.	<a href="http://eea.eionet.eu.int/e-c-chm/nl/nl-2.htm">http://eea.eionet.eu.int/e-c-chm/nl/nl-2.htm</a>
2000	Technological opportunities and challenges in building a global biological information infrastructure.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	21th International Congress of Entomology. Iguassu Falls, Brasil, 20-26 August 2000.	Abstract book I, p. 194.		<a href="http://www.eionet.eu.int/Topic_Areas/Biodiversit y/GBII/ice-gbii-03">http://www.eionet.eu.int/Topic_Areas/Biodiversit y/GBII/ice-gbii-03</a>
2000	The future of the European Community Clearing House Mechanism for Biodiversity.	<input type="checkbox"/>	News article	Anon.		EC-CHM Newsletter No. 4, December 2000. 2 p.	European Environment Agency, Copenhagen.	
2000	Towards a global biological information infrastructure.	<input type="checkbox"/>	Slides	Saarenmaa, H.	Universidade Católica de Brasília - UCB. Pró-reitoria de pós-graduação e pesquisa - PRPGP. Palestra 1 de Setembro de 2000.			
1999	A knowledge system environment for ecosystem management.	<input checked="" type="checkbox"/>	Published article	Coulson, R. N., Saarenmaa, H., Daugherty, W. C., Rykiel, E. J.,	Klopatek, J.M., & Gardner, R.H. (editors). Landscape ecological analysis: issues and applications. 400 p.	57-79.	Springer-Verlag, New York.	
1999	Building a portal for the EIONET community.	<input type="checkbox"/>	News article	Saarenmaa, H.		EIONET Newsletter 5.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/">http://www.eionet.eu.int/docu/newsletter/</a>
1999	Role of metainformation in networks of institutions and administrations - practical examples and future challenges.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	6th Workshop of the European Topic Centre on Catalogue of Data Sources (ETC/CDS). Oslo, September 1999.			<a href="http://www.mu.niedersachsen.de/cds/etc-cds_neu/library/abstract_sampler.pdf">http://www.mu.niedersachsen.de/cds/etc-cds_neu/library/abstract_sampler.pdf</a>
1999	Supporting biodiversity conservation - Developing the EC Clearing-House Mechanism under the Convention on Biological	<input type="checkbox"/>	Abstract, slides	Delbaere, B. & Saarenmaa, H.	6th Workshop of the European Topic Centre on Catalogue of Data Sources (ETC/CDS). Oslo, September 1999.			<a href="http://www.mu.niedersachsen.de/cds/etc-cds_neu/library/abstract_sampler.pdf">http://www.mu.niedersachsen.de/cds/etc-cds_neu/library/abstract_sampler.pdf</a>
1999	The Global Biodiversity Information Facility: Architectural and implementation issues.	<input type="checkbox"/>	Published article	Saarenmaa, H.	OECD Megascience Forum, Working Group for Biodiversity Informatics. National Science Foundation, Arlington, Virginia, March 29-31,	Technical Reports Vol. 34, 34 p.	European Environment Agency, Copenhagen.	<a href="http://reports.eea.eu.int/Technical_report_No_34/">http://reports.eea.eu.int/Technical_report_No_34/</a>
1998	Become and EIONET leader.	<input type="checkbox"/>	News article	Saarenmaa, H.		EIONET Newsletter 2.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/">http://www.eionet.eu.int/docu/newsletter/</a>
1998	Development of the EIONET, the European Environment Information and Observation Network.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Pillman, W. & Simpson, J. (editors). Innovative services and solutions for the citizen. Environment and Related Transport Telemaics Results.	139-143.		<a href="http://www.rec.org/REC/Programs/Telematics/D ETERMINE/EuroInfoSession/HSaarenmaa.html">http://www.rec.org/REC/Programs/Telematics/D ETERMINE/EuroInfoSession/HSaarenmaa.html</a>

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1998	EIONET - the Extranet of the European Environment Agency.	<input type="checkbox"/>	News article	Saarenmaa, H.		Bulletin Informatique, Octobre 1998: 30-32.	Communautés européennes, Bruxelles.	<a href="http://www.eionet.eu.int/docu/bi-eionet-01.html">http://www.eionet.eu.int/docu/bi-eionet-01.html</a>
1998	EIONET becomes a player in the information society -- The European Environment Agency gearing up for IDA II.	<input type="checkbox"/>	News article	Anon.		IDA Report 8, 5-6.	European Commission, Brussels.	<a href="http://www.ispo.cec.be/ida/text/english/newslet8/index3.htm">http://www.ispo.cec.be/ida/text/english/newslet8/index3.htm</a>
1998	EIONET Intranet, Extranet, and beyond.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Resource Technology '98 Symposium, Rovaniemi, Finland, June 8-12, 1998.			<a href="http://www.metla.fi/tapahtumat/rt98/abs/Saarenmaa.htm">http://www.metla.fi/tapahtumat/rt98/abs/Saarenmaa.htm</a>
1998	Group collaboration starting on EIONET telematics network.	<input type="checkbox"/>	News article	Saarenmaa, H.		EEA Newsletter 16: 4-5.	European Environment Agency, Copenhagen.	
1998	Information society technologies and the environment.	<input type="checkbox"/>	Slides	Saarenmaa, H., Jiménez-Beltrán, D. & Boch, W.	Resource Technology '98 Symposium, Rovaniemi, Finland, June 8-12, 1998.	Plenary speech.		
1998	Open EIONET - sustainable information.	<input type="checkbox"/>	News article	Saarenmaa, H.		EIONET Newsletter 3.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/">http://www.eionet.eu.int/docu/newsletter/</a>
1998	Phare countries joined the EIONET telematics network.	<input type="checkbox"/>	News article	Blagoev, S. & Saarenmaa, H.		Phare CORINE/EEA Newsletter 8: 7.	European Commission, Brussels.	
1997	Comparison of protection methods of pine stacks against <i>Tomicus piniperda</i> .	<input checked="" type="checkbox"/>	Published article	Jääskelä, M., Peltonen, M., Saarenmaa, H., & Heliövaara, K.		Silva Fennica 31(2): 129-141.		<a href="http://www.metla.fi/silvafennica/abs/sa31/sa312143.htm">http://www.metla.fi/silvafennica/abs/sa31/sa312143.htm</a>
1997	Current situation and future prospects of EIONET.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Alef, K. et al. (13 editors). Eco-Inforna '97. Information and Communication in Environment and Health Issues. Volume 12: 214-219.			
1997	e-EIONET. Extranet and corporate portal of the European Environment Agency.	<input type="checkbox"/>	Data product	Saarenmaa, H.	Zope, Python, LDAP.		European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/">http://www.eionet.eu.int/</a>
1997	EIONET (European Environment and Observation Network).	<input type="checkbox"/>	Published article	Saarenmaa, H.		The Globe 38: 7-9.		

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1997	EIONET architecture and services.	<input type="checkbox"/>	News article	Saarenmaa, H.		EIONET Newsletter N:o 0: 1-2.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/">http://www.eionet.eu.int/docu/newsletter/</a>
1997	European Topic Centres to join EIONET's telematic network.	<input type="checkbox"/>	News article	Saarenmaa, H.		EIONET Newsletter 1.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/">http://www.eionet.eu.int/docu/newsletter/</a>
1997	Europe's Environment Network (IDA EIONET).	<input type="checkbox"/>	News article	Anon.		IDA Report 4, p. 7.	European Commission, Brussels.	
1997	Expectations for the road ahead: EIONET enters the operational phase.	<input type="checkbox"/>	News article	Saarenmaa, H. & Norup, B.		EIONET Newsletter 1.	European Environment Agency, Copenhagen.	<a href="http://www.eionet.eu.int/docu/newsletter/">http://www.eionet.eu.int/docu/newsletter/</a>
1997	Sirex: forest damage diagnosis as a constraint satisfaction problem.	<input checked="" type="checkbox"/>	Published article	Perttunen, J., Väkevä, J. & Saarenmaa, H.		AI Applications 11(2):19-32.		
1997	The EEA EIONET telematic network.	<input type="checkbox"/>	News article	Saarenmaa, H. & Maes, J.		Phare CORINE/EEA Newsletter 5: 20-23.	European Commission, Brussels.	
1996	A diagnostic information service about damaging agents of trees on the World-Wide Web.	<input type="checkbox"/>	Published article	Väkevä, J., Perttunen, J., Saarenmaa, H. & Saarikko, J.	Kempf, A. & Saarenmaa, H. (eds). Internet Applications and Electronic Information Resources in Forestry and Environmental Sciences.	EFI Proceedings 10: 129-137.		<a href="http://www.efi.fi/publications/proceedings/10.html">http://www.efi.fi/publications/proceedings/10.html</a>
1996	Bringing environmental decisions closer to the citizen.	<input type="checkbox"/>	News article	Anon.		IDA Report 1, p. 8.	European Commission, Brussels.	
1996	Building a new environmental infobahn. The European Environment Agency and EIONET getting into full operation.	<input type="checkbox"/>	News article	Saarenmaa, H. & Maes, J.		The Information Technology Magazine.	European Commission, Brussels.	
1996	Internet Applications and Electronic Information Resources in Forestry and Environmental Sciences.	<input type="checkbox"/>	Published volume	Kempf, A. & Saarenmaa, H. (eds).	Workshop at European Forest Institute, Joensuu, Finland, 1-5 August 1995.	EFI Proceedings 10, 152 p.		<a href="http://www.efi.fi/publications/proceedings/10.html">http://www.efi.fi/publications/proceedings/10.html</a>
1996	LIGNUM: A tree model based on simple structural units.	<input checked="" type="checkbox"/>	Published article	Perttunen, J., Sievänen, R., Nikinmaa, E., Salminen, H.,		Annals of Botany 77: 87-98.		

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1996	Metsäntutkimuslaitoksen tietohallintostrategia 1996.	<input type="checkbox"/>	Published article	Lehto, K., Saarenmaa, H., Salminen, H., Kurttio, O., Pöntinen, J., Leppänen, P., &		Metsäntutkimuslaitoksen tiedonantoja 600, 35 p.		
1996	Object- oriented taxonomic biodiversity databases on the World Wide Web.	<input type="checkbox"/>	Published article	Saarenmaa, H., Leppäjärvi, S., Perttunen, J. & Saarikko, J.	Kempf, A. & Saarenmaa, H. (eds). Internet Applications and Electronic Information Resources in Forestry And Environmental Sciences.	EFI Proceedings 10: 121-128.		<a href="http://www.metla.fi/hank e/3116/emit/akatemia- lvtj/oobdwww-nature- latest.htm">http://www.metla.fi/hank e/3116/emit/akatemia- lvtj/oobdwww-nature- latest.htm</a>
1996	Propagating the effects of herbivore attack in an object-oriented model of a tree.	<input type="checkbox"/>	Published article	Perttunen, J., Saarenmaa, H., Sievänen, R., Salminen, H., Pouttu,	Mattson, W.J., Niemelä, P. & Rousi, M. (editors). Proceedings of the IUFRO symposium "Dynamics of forest herbivory: Quest for pattern	USDA Forest Service, General Technical Report NC-183: 60-67.		
1996	Sirex: Diagnosing forest damage through the World Wide Web. 122-132.	<input type="checkbox"/>	Published article	Perttunen, J., Väkevä, J. & Saarenmaa, H.	Alader, J., Honkela, T. & Jakobsson, M. (editors) STeP'96 - Genes, nets and symbols. Finnish Artificial Intelligence Conference, Vaasa,	Publications of the Finnish Artificial Intelligence Society.		
1996	The pragmatism of ecosystem management: planning, problem solving and decision making with knowledge-based systems.	<input type="checkbox"/>	Published article	Coulson, R.N., Daugherty, W.C., Rykiel, E.J.Jr., Saarenmaa, H. &	Global networks for environmental information. Proceedings of Eco- Informa'96, Vol. 10: 342-351. Lake Buena Vista, Florida, November 4-7,			
1995	A model integrating the structure and physiological activities of trees.	<input type="checkbox"/>	Abstract, slides	Sievänen, R., Perttunen, J., Nikinmaa, E., Salminen, H., Saarenmaa, H. &	L'Arbe - The Tree. 3eme Colloque International - 3rd International Congress, 11-16 septembre 1995, Montpellier, France. Abstracts, p. 41.			
1995	A World-Wide Web database for managing taxonomic biodiversity information.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H., Leppäjärvi, S., Perttunen, J., & Saarikko, J.	Korpilahti, E., Salonen, T., & Oja, S. (editors) Caring for the forest: Research in a Changing World. IUFRO XX World Congress, 6-12	Abstracts of invited papers, p. 323.		
1995	Authoring network multimedia.	<input type="checkbox"/>	Manuscript, slides	Paananen, V.-M. & Saarenmaa, H.	Internet Applications and Electronic Information Resources in Forestry and Environmental Sciences. Workshop at European Forest	World Wide Web presentation and tutorial, 11 p.		
1995	Biodiversiteetti tietoverkoissa.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Karjalainen 12.8.1995. s. 2 (yliö).		
1995	Building object-oriented decision support systems for integrated pest management.	<input type="checkbox"/>	Published article	Saarenmaa, H., Marshall, L. & Power, J.M.	Hain, F.P., Salom, S.M., Ravlin, W.F., Payne, T.L. & Raffa, K.F. (editors). Proceedings of the IUFRO Symposium "Behavior, population	635-644.	Ohio State University and Ohio Agricultural Research and Development Center,	
1995	EEA announces its World-Wide Web service.	<input type="checkbox"/>	News article	Anon.		EEA Newsletter 6, 1995.	European Environment Agency, Copenhagen.	

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1995	Epirrita autumnata defoliation of mountain birch.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	Ritari, A., Saarenmaa, H., Saarela, M. & Poikajärvi, H. (editors). Northern forest silviculture and management. Proceedings of the IUFRO S1.05-12	Research Papers 567: p. 283.	The Finnish Forest Research Institute, Rovaniemi Reserch Station.	
1995	Forest pest and disease hypermedia in the World Wide Web.	<input type="checkbox"/>	Abstract, poster	Väkevä, J., Saarikko, J., Saarenmaa, H. & Perttunen, J.	Korpilahti, E., Salonen, T., & Oja, S. (editors) Caring for the Forest: Research in a Changing World. Poster Abstracts. IUFRO XX World			
1995	Getting ready for the information society - EFI announces its World Wide Web service.	<input type="checkbox"/>	News article	Saarenmaa, H.		EFI News 3(1): 1-2.		
1995	Lignum: modeling trees with simple structural units.	<input type="checkbox"/>	Published article	Sievänen, R., Nikinmaa, E., Hakula, H., Perttunen, J., Salminen, H.,		CSC News, June 1995, 20-24.		
1995	LIGNUM: oliopohjainen puun kasvumalli.	<input type="checkbox"/>	Published article	Perttunen, J., Sievänen, R., Nikinmaa, E., Salminen, H., Saarenmaa, H. &	Eero Hyvönen ja Jouko Seppänen (toim.) Keinoelämä - Artificial Life. Tekniikkaa, luonnontiedettä, filosofiaa ja taidetta. Symposio	Publications of the Finnish Artificial Intelligence Society - FAIS, s. 151-160.		
1995	Mikä on FINBIN?	<input type="checkbox"/>	Slides	Saarenmaa, H.		9 s.		D:\home\hannu\fbkalvot.htm
1995	Multi-agent problem solving and construction of decision support systems for natural resource management.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H., Perttunen, J., Väkevä, J. & Power, J.M.		AI Applications 9(1): 99-111.		<a href="http://www.bioshare.net/Stories/docu/multiagent-scanned.pdf">http://www.bioshare.net/Stories/docu/multiagent-scanned.pdf</a>
1995	Northern forest silviculture and management.	<input type="checkbox"/>	Published article	Ritari, A., Saarenmaa, H., Saarela, M. & Poikajärvi, H. (editors).	Proceedings of the IUFRO S1.05-12 Symposium in Lapland, Finland, August 16-22, 1987.	Research Papers 567, 290 p.	The Finnish Forest Research Institute, Rovaniemi Reserch Station.	
1995	Object-oriented modelling and GIS integration in a decision support system for the management of eastern hemlock looper in	<input checked="" type="checkbox"/>	Published article	Power, J.M. & Saarenmaa, H.		Computers and Electronics in Agriculture 12: 1-18.		
1995	SIREX: A multimedia expert system for forest pest identification on the World-Wide Web.	<input type="checkbox"/>	Data product	Väkevä, J., Perttunen, J. & Saarenmaa, H.	Sun Solaris, Kappa, C++.			
1995	Sustainable forest landscape management in an information society - the issue of economic and environmental impact of forest	<input type="checkbox"/>	Abstract, slides	Coulson, R.N. & Saarenmaa, H.	Korpilahti, E., Salonen, T., & Oja, S. (editors) Caring for the forest: Research in a Changing World. IUFRO XX World Congress, 6-12	Abstracts of invited papers, p. 184.		

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1995	World Wide Web site of the European Environment Agency.	<input type="checkbox"/>	Data product	Both, F., Jansen, B., Bjarnason, S. & Saarenmaa, H.	Netscape Enterprise Server.		European Environment Agency, Copenhagen.	<a href="http://www.eea.eu.int/">http://www.eea.eu.int/</a>
1994	Decision support systems for ecosystem management.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Paavilainen, E. & Halko, L. (Editors). Finnish-Canadian Forestry Seminar. Gustavelund, Tuusula, Finland, May 16-18, 1994.	Research Papers 512: 85-89.	The Finnish Forest Research Institute.	
1994	Ecosystem management in an information society.	<input type="checkbox"/>	Abstract, slides	Coulson, R.N. & Saarenmaa, H.	45th Western Forest Insect Work Conference, Albuquerque, New Mexico, March 7-11, 1994.	p. 67.		
1994	Finland Technology Exchange.	<input type="checkbox"/>	Manuscript	Anon.	USDA Forest Service, Forest Pest Management and Finnish Forest Research Institute. Ft. Collins, Colorado. June 21 - July 6, 1994.	12 p.		
1994	Imagery-based diagnosis of forest tree damage - an object-oriented expert system.	<input type="checkbox"/>	Abstract, slides	Väkevää, J., Perttunen, J. & Saarenmaa, H.	Power, J.M., Strome. M., & Daniel, T. (Editors). Decision Support 2001. Proceedings, Resource Technology '94 Symposium. Toronto, Ontario,	p. 499.	American Society for Photogrammetry and Remote Sensing, Bethesda, Maryland.	<a href="http://www.metla.fi/hank/e/3116/www-toronto/www-torpost-summary.html">http://www.metla.fi/hank/e/3116/www-toronto/www-torpost-summary.html</a>
1994	Modelling trees using an object-oriented scheme.	<input type="checkbox"/>	Abstract, slides	Salminen, H., Saarenmaa, H., Perttunen, J., Sievänen, R.,	Power, J.M., Strome. M., & Daniel, T. (Editors). Decision Support 2001. Proceedings, Resource Technology '94 Symposium. Toronto, Ontario,	p. 426.	American Society for Photogrammetry and Remote Sensing, Bethesda, Maryland.	
1994	Modelling trees with an object-oriented scheme.	<input checked="" type="checkbox"/>	Published article	Salminen, H., Saarenmaa, H., Perttunen, J., Sievänen, R.,		Mathematical and Computer Modelling 20(8): 49-64.		<a href="http://www.metla.fi/pp/HSal/personal/esitelma.html">http://www.metla.fi/pp/HSal/personal/esitelma.html</a>
1994	Object-oriented modeling of the tasks and agents in integrated forest health management.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H., Perttunen, J., Väkevää, J. & Nikula, A.	American Association for Artificial Intelligence, National Conference '92 Workshop on AI in Natural Resources. San Jose, California, July	AI Applications in Natural Resource Management 8(1): 43-59.		D:\home\hannu\docu\aaai92.pdf
1994	Object-oriented modelling of natural and artificial agents in ecosystem and natural resource management.	<input type="checkbox"/>	Published volume	Saarenmaa, H. & Gimblett, R. (Guest Editors)		Mathematical and Computer Modelling 20(8), 133 p.		
1994	Object-Taxon (1.1) : A taxonomic database based on object-oriented database back-end and World Wide Web front-end.	<input type="checkbox"/>	Data product	Perttunen, J., Saarenmaa, H., & Väkevää, J.	C++, Objectivity/DB, DEC Alpha OSF/1.			
1994	Olio-ohjelmointi puutavaran kaukokuljetuksen simuloinnissa.	<input type="checkbox"/>	Manuscript	Saarenmaa, H. & Hannila, A.	Helsingin yliopisto, luentosarja Y185, dokumentaatio. 34 s.			

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1994	Tavoitteeksi ekosysteemien hoito.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Yliopisto 42(5): 16-18.		
1994	Tietoyhteiskunta ekosysteemien hoitajaja -- metsäopetuksen haasteet.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.		Moniste 8 s.		
1994	Using World Wide Web and object-oriented databases for managing and disseminating information about pest management and	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H. Leppäjärvi, S., Perttunen, J., Väkevä, J. & Saarikko, J.	Power, J.M., Strome. M., & Daniel, T. (Editors). Decision Support 2001. Proceedings, Resource Technology '94 Symposium. Toronto, Ontario,	p. 498.	American Society for Photogrammetry and Remote Sensing, Bethesda, Maryland.	
1994	World Wide Web site of the European Forest Institute.	<input type="checkbox"/>	Data product	Saarenmaa, H.	Netscape Enterprise Server.			<a href="http://www.efi.fi/">http://www.efi.fi/</a>
1993	A framework for multi-agent problem solving and construction of decision support systems for natural resource management.	<input type="checkbox"/>	Published article	Saarenmaa, H., Perttunen, J., Väkevä, J. & Power, J.M.	Stone, N.D. (Editor). AI in Agriculture, Natural Resources, and Environmental Sciences. 13th International Joint Conference on	171-190.		
1993	Object-oriented databases: Representation of Complexities in biological taxonomies, biological observations, and organism	<input type="checkbox"/>	Abstract, poster	Saarenmaa, H. & Kaila, E.	Taxonomical Databases Working Group, 9th Meeting, Smithsonian Institution, Washington, D.C., October 26-29, 1993.			
1993	Object-oriented models of insect phenology and population dynamics: tools for an integrated pest management system for the	<input type="checkbox"/>	Published article	Saarenmaa, H.	Bowers, W.J. & Hudak, J. (Editors) Balsam Woolly Adelgid Workshop, Corner Brook, Newfoundland, September 27-28, 1993. Reports of	12 p.	Canadian Forestry Service, St. John's, Newfoundland.	
1993	Object-oriented multi-media systems for education in forest pest management.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H., Väkevä, J., Perttunen, J. & Nikula, A.	44th Western Forest Insect Work Conference, Sacramento, California, March 1-4, 1993.	15 p.		
1993	Organisaatiokysymyksiä tarkasteltava yli rajojen.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsälehti 15.4.1993, s. 6.		
1993	PUUHA: Oliopohjainen tietämuspohjainen simulaattori puutavaran kaukokuljetuksen suunnitteluun.	<input type="checkbox"/>	Data product	Saarenmaa, H. & Hannila, A.	Sun Solaris, MS-Windows, Kappa, 1993.			
1992	A rule-based expert system for the diagnosis of biotic damage on Scots pine.	<input checked="" type="checkbox"/>	Published article	Väkevä, J. and Saarenmaa, H.		Scandinavian Journal of Forest Research 7(4): 533-546.		

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1992	Diagnosis of forest tree damaging agents - An expert system application.	<input type="checkbox"/>	Abstract, poster	Väkevä, J., Saarenmaa, H., Perttunen, J. & Nikula, A.	Entomological Society of America Annual Meeting, Baltimore, Maryland, December 6-10, 1992.			
1992	Integrated pest management in forests and information technology.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.	Dimitri, L. (ed.) Proceedings of the Workshop "Semiochemicals in the pest management of bark beetles", Hann. Münden, Germany, August 19-	Journal of Applied Entomology 114: 321-332.		
1992	METLAn uusi tietohallintoyksikkö.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Pihkaposti 2/92, 24-27.		
1992	Metsätuhojen tunnistaminen asiantuntijajärjestelmän avulla: tavoitteena uusi media.	<input type="checkbox"/>	Published article	Saarenmaa, H., Väkevä, J. & Perttunen, J.	Nikula A., Varmola M. & Lahti M.-L. (Toim.) Metsäntutkimuspäivät Rovaniemellä 19-20.5.1992.	Metsäntutkimuslaitoksen tiedonantoja 437: 78-89.		
1992	New electronic mailing list for forest scientists.	<input type="checkbox"/>	News article	Saarenmaa, H.		IUFRO News 21(3): 23.		
1992	Object-oriented topological simulation models of trees and massively parallel computing.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Salminen, H. Katermaa, T. (editors). Simulation of Forest Development. Symposium in Saariselkä, Finland, October 14-16, 1991.	Bulletins of the Finnish Forest Research Institute 407: 75-82.		
1992	Strategic planning of information system in Finnish Forestry.	<input type="checkbox"/>	Published article	Mikkola, E. & Saarenmaa, H.	Minowa, M. & Tsuyuki, S. (eds.) Integrated Forest Management Information Systems. IUFRO S4.02, S4.04 Symposium, Tsukuba, Japan,	66-75.	Japan Society of Forest Planning Press.	
1992	The design of integrated resource management systems.	<input checked="" type="checkbox"/>	Published article	Loh, D.K. & Saarenmaa, H.		Silva Fennica 26(2): 111-122.		
1992	Tiedon Puu (1.0): Oliopohjainen multimediajärjestelmä metsätuhojen tunnistamiseen. An object-oriented multimedia system	<input type="checkbox"/>	Data product	Perttunen, J., Väkevä, J. & Saarenmaa, H.	Sun Sparcstation, X-Window System, IntelliCorp ProKappa.			
1992	Tietotekniikka avuksi myös metsätuhojen tunnistamiseen. Multimedia tarjoaa aivan uusia mahdollisuuksia tutkijoille.	<input type="checkbox"/>	News article	Anon.		Pohjolan Sanomat 20.5.1992. s. 7.		
1991	Artificial intelligence, decision support, and information systems strategies in forestry.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.	IUFRO XIX World Congress, Montreal, Canada, August 5-11, 1990. Congress Reports, Volume B, 379-390.			

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1991	Current advances in the use of computers in forest research.	<input type="checkbox"/>	Published article	Saarenmaa, H. (editor).	Proceedings of the IUFRO S4.11-01 Workshop in Joensuu, Finland, on February 14th, 1991.	Bulletins of the Finnish Forest Research Institute 395, 83 p.		
1991	Hyönteistuhoriski keinotekoisessa ylispuiden kelouuttamisessa.	<input type="checkbox"/>	Published article	Vitikka, P., Posio, H. & Saarenmaa, H.		Metsäntutkimuslaitoksen Tiedonantoja 378, 32 s.	Rovaniemen tutkimusasema.	
1991	Luonnonvarojen tietopalvelun menetelmälliset lähtökohdat ja toteuttamismahdollisuudet.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	Taksaattoriklubin seminaari "Luonnonvarojen tietohuolto", Kiljava 21-22.11.1991.	6 s.		
1991	Metsätalouden tietohallintasuunnitelma. Metsätalouden tietohallintotyöryhmän muistio.	<input type="checkbox"/>	Report	Anon.	Työryhmämuistio MMM 1991: 2, 28 s., liitt.		Maa- ja metsätalousministeriö.	
1991	Minkä arvoista ajantasainen metsätieto?	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsälehti 14.11.1991, s. 6.		
1991	Model-based reasoning about natural ecosystems: An algorithm to reduce the computational burden associated with simulating	<input checked="" type="checkbox"/>	Published article	Ahonen, J. & Saarenmaa, H.	Computer Science for Environmental Protection. 6th Symposium. Munich, Germany, December 4-6, 1991.	193-200.	Springer-Verlag, Heidelberg.	
1991	Object-oriented design of topological tree and forest models.	<input type="checkbox"/>	Abstract, poster	Saarenmaa, H.	Proceedings of the First European Symposium on Terrestrial Ecosystems: Forests and Woodlands. Florence, Italy, May 20-	2 p.		
1991	Rule-based diagnosis of Scots pine pests.	<input type="checkbox"/>	Published article	Väkevä, J. & Saarenmaa, H.	Saarenmaa, H. (editor) Current advances in the use of computers in forest research.	Bulletins of the Finnish Forest Research Institute 395: 51-60.		
1991	Short-term forest management planning with logic programming.	<input type="checkbox"/>	Published article	Saarenmaa, H., Kaila, E., Nuutinen, T. & Kolström, T.	Saarenmaa, H. (editor) Current advances in the use of computers in forest research.	Bulletins of the Finnish Forest Research Institute 395: 61-68.		
1991	The new information system architectures and strategies of the Finnish Forest Research Institute.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H., Kaila, E., Lehto, K., Piippo, H., Salminen, H. & Pöntinen, J.	Buhyoff, G. (editor) Resource Technology 90. Proceedings of the Second International Symposium On Advanced Technology in Natural	569-578.		
1991	Tulosohjauksen soveltaminen Metsäntutkimuslaitoksessa: miten Metsäntutkimuslaitoksen tuloksellisuutta voidaan mitata ja	<input type="checkbox"/>	Manuscript	Saarenmaa, H.	Tulosohjauksen soveltaminen metsätalouden neuvontaorganisaatioissa ja Metsäntutkimuslaitoksessa. Maa- ja	8 s.		

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1990	Conceptual models behind the information systems architecture of the Finnish Forest Research Institute.	<input type="checkbox"/>	Abstract, poster	Kaila, E., Saarenmaa, H., Lehto, K., Salminen, H. & Pöntinen, J.	Buhyoff, G. (editor) Resource Technology 88. Proceedings of the Second International Symposium On Advanced Technology in Natural			
1990	Frame- and rule-based knowledge representation in an expert system for integrated management of bark beetles.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Silva Fennica 24(2): 249-260.		
1990	Knowledge discovery from a forestry database into an expert system.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H. & Saarenmaa, L.	Zazueta, F.S., Watson, D.G., Del Botcher, A.B. (eds.) Proceedings of the 3rd international conference on computers in agricultural extension	Vol 1, 355-360.		
1990	METLA: Metsäntutkimuslaitoksen tietojärjestelmien kuvauskanta.	<input type="checkbox"/>	Data product	Lehto, K., Saarenmaa, H., Kaila, E. & Pöntinen, J.	386/AT, Texas Instruments Information Engineering Facility IEF.			
1990	Metsäntutkimuslaitoksen tietojärjestelmästrategia. Työryhmän mietintö.	<input type="checkbox"/>	Published volume	Saarenmaa, H., Lehto, K., Kaila, E., Salminen, H. & Pöntinen, J. (toim.)	Metsäntutkimuslaitoksen tiedonantoja 350: 78 ss., liitt.			
1990	Quarterly newsletter.	<input type="checkbox"/>	Newsletter	Saarenmaa, H. (editor).		Newsletter of the IUFRO S6.02-1 Working Party Computers in		
1990	SRM-tietojärjestelmä tutkimus julkishallinnon tutkimuslaitoksessa.	<input checked="" type="checkbox"/>	Published article	Lehto, K. & Saarenmaa, H.		Tietojenkäsittelytiede 1(1): 18-28.		
1990	Tekoäly ja metsäntutkimus.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Joensuun Metsäylioppilaat, kurssi 7, 49-51.	Joensuun Yliopisto.	
1990	Tietokoneavusteinen päätöksenteko metsätaloudessa.	<input checked="" type="checkbox"/>	Published article	Kaila, E. & Saarenmaa, H.		Folia Forestalia 757, 34 p.		<a href="http://www.metla.fi/aika_kauskirja/ff757/ff75700.htm">http://www.metla.fi/aika_kauskirja/ff757/ff75700.htm</a>
1990	Tutkimusosiemien kehittäminen.	<input type="checkbox"/>	Published article	Varmola, M. & Saarenmaa, H.		Pihkaposti 9/90, 4-5.		
1989	A model for the timing of swarming of <i>Tomicus piniperda</i> (Coleoptera, Scolytidae).	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Holarctic Ecology 12: 441-444.		

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1989	Artificial intelligence concepts, techniques, and applications for forestry.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.	Burkhardt, H.E., Rauscher, H.M. & Johann, K. (eds.) Artificial intelligence and growth models for forest management decisions.	Publication N:o FWS-1-89. School of Forestry and Wildlife Resources,		
1989	Cooperation between Finland and the United States in forest research.	<input type="checkbox"/>	Report	Saarenmaa, H.	Reports of the U.S.- Finnish meeting on science and technology. Helsinki, October 23-26, 1989.	14 p.	Ministry of Trade and Industry, Division for International Affairs.	
1989	Eläinten aiheuttamat metsätuhot Lapissa.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Varmola, M. & Saastamoinen, O. (toim.) Lapin Metsäkirja.	Acta Lapponica Fennica 125-134.		
1989	Expert systems and IPM: an overview.	<input checked="" type="checkbox"/>	Published article	Stone, N.D. & Saarenmaa, H.	Cavallaro, R. & DeLucchi, V. Proceedings of the Parasitis 88 Conference. Barcelona, Spain. October 25-28, 1988. 549 p.	71-87.		
1989	Johdon koulutusohjelmalla pohjaa kehittämislle.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Pihkaposti 1/1989: 7-12.		
1989	Managing moose damage in forest plantations: a deep model of animal behavior on a geographic information system platform.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H. & Nikula, A.	Conference Proceedings. 9th International Workshop on Expert Systems and Their Applications, Avignon, France, May 29 - June 2,	825-831.		
1989	Managing moose damage in forest plantations: a deep model of animal behavior on a geographic information system platform.	<input type="checkbox"/>	Abstract, slides	Nikula, A. & Saarenmaa, H.	AIRIES '89, Artificial Intelligence in Environmental Science Conference, Falls Church, Virginia, May 2-4, 1989.			
1989	Ounastunturin Pyhäkeron suurperhoslajisto.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.		5 s.		<a href="http://www.bioshare.net/Stories/ounastxt.htm">http://www.bioshare.net/Stories/ounastxt.htm</a>
1989	Tavoitteena metsätietoasema.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsä ja Puu 3/1989: 21-23.		
1989	Tuhohyönteisten ja sinistymän esiintyminen myrskyn kaatamisissa puissa Urho Kekkosen kansallispuistossa.	<input type="checkbox"/>	Published article	Saarenmaa, H., Heliövaara, K. & Väisänen, R.	Poikajärvi, H., Sepponen, P. & Varmola, M. (toim.) Tutkimus luonnonsuojelualueilla. Research activities on the nature conservation	Folia Forestalia 736: 66-75.		
1988	An artificial intelligence approach to simulating animal / habitat interactions.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H., Stone, N.D., Folse, L.J., Packard, J.M., Grant, W.E., Makela, M.E., &		Ecological Modelling 44: 125-141.		

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1988	Attack and reproduction of bark beetles in windthrown pine in northern Finland.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Payne, T.L. & Saarenmaa, H. (editors). Integrated Control of Scolytid Bark Beetles. Proceedings of the IUFRO working party S2.07-05	69-75.	Virginia Polytechnic Institute and State University.	
1988	DEEP-FOREST: Knowledge system prototype for forest health management.	<input type="checkbox"/>	Data product	Saarenmaa, H.	Symbolics, KEE.			
1988	Integrated Control of Scolytid Bark Beetles.	<input type="checkbox"/>	Published volume	Payne, T.L. & Saarenmaa, H. (editors).	Proceedings of the IUFRO working party S2.07-05 and XVIII Congress of Entomology Symposium. Vancouver, B.C. July 3-9, 1988.	355 pp.	Virginia Polytechnic Institute and State University, Blacksburg.	
1988	Knowledge-based models of forest health.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H.	Effects of Air Pollutants and Acidification in Combination with Climatic Factors on Forests, Soils, and Waters in Northern			
1988	Management von Elchwildschäden im Forstbetrieb: Modellierung tierischer Aktivitäten auf der Grundlage eines geografischen	<input type="checkbox"/>	Published article	Saarenmaa, H. & Münch, H.-J.		Informatik in der Land-, Forst- und Ernährungswirtschaft 3(2): 13-17.		
1988	Metsänhoitaja Piilaaksossa.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsänhoitaja 38(4): 15-16.		
1988	Metsäntutkimuskeskus vuonna nolla.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Pihkaposti 4/1988: 17-23.		
1988	Model-based reasoning in ecology and natural resource management.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Buhyoff, G. (editor) Resource Technology 88. Proceedings of International Symposium On Advanced Technology in Natural	141-157.		
1988	Tekoälyn mahdollisuudet metsätalouden suunnittelussa.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Nuutinen, T. & Kinnunen, H. (toim.) Metsätalouden tietojärjestelmät. Seminaari Rovaniemellä 18-19.11.1987.	Silva Carelica 10: 39-48.		
1988	TUHOMIES: Asiantuntijajärjestelmäprototyyppi metsän tuholaiden määrittämiseen.	<input type="checkbox"/>	Data product	Saarenmaa, H.	IBM PC, Texas Instruments Personal Consultant Plus.			
1987	Hirvien aivoitukset tietokoneelle.	<input type="checkbox"/>	News article	Anon.		Tietoviikko s. 4. 9.4.1987.		

<i>Year</i>	<i>Title</i>	<i>Refereed</i>	<i>Format</i>	<i>Author</i>	<i>Platform</i>	<i>Reference</i>	<i>Publisher</i>	<i>Source</i>
1987	I-IPM: Expert system for integrated pest management. User's Guide.	<input type="checkbox"/>	Data product	Saarenmaa, H.	Symbolics, LISP.	4 p.		
1987	Korjaamaton myrskyn kaatama mäntysahapuu pilaantuu vuodessa tai parissa.	<input type="checkbox"/>	News article	Anon.		Oma Maa 48/1987, s.4.		
1987	Korkeiden maiden metsien uudistaminen. Ajankohtaista tutkimuksesta.	<input type="checkbox"/>	Published volume	Saarenmaa, H. & Poikajärvi, H. (toim.)	Metsäntutkimuspäivät Rovaniemellä 1987.	Metsäntutkimuslaitoksen tiedonantoja 278: 1-179.		
1987	Metsäntutkimuslaitoksen Rovaniemen tutkimusaseman lisärakennuksen perustamis- ja esisuunnitelma sekä sen	<input type="checkbox"/>	Report	Saastamoinen, O., Saarenmaa, H., Vekkele, E. & Laivamaa, P.		32 s., liitt. 2.2.1987.		
1987	Metsätalouden tietojärjestelmien laitos Helsingin Yliopistoon.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsänhoitaja 37(2): 26-29.		
1987	Metsätalous etsii sääntöjä yhteiseen järjestelmään.	<input type="checkbox"/>	News article	Anon.		Tietoviikko 26.11.1987: s.3.		
1987	Mitä Lapin metsistä tiedetään ja ei tiedetä.	<input type="checkbox"/>	Slides	Saarenmaa, H.	Lapin kesäyliopiston kesäseminaari 3.6.1987.	9 s.		
1987	Myrskyjen seuraustuhot Lapin metsissä 1982-86.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Metsäntutkimuspäivät Rovaniemellä 1987.	Metsäntutkimuslaitoksen tiedonantoja 278: 149-151.		
1987	Quarterly newsletter.	<input type="checkbox"/>	Newsletter	Saarenmaa, H. (editor)	IUFRO S6.02 Working Party Computers, statistics, and artificial intelligence. No: 14, 7 pp. April 1987.			
1987	Rovaniemen asiantuntijajärjestelmäkurssin 21-24.4.1987 harjoitustyöt.	<input type="checkbox"/>	Slides	Saarenmaa, H. (toim.)		METIK-hanke 22: 1-35.	Metsäntutkimuslaitos, Rovaniemen tutkimusasema.	
1987	Tietokone asiantuntijana. Tekoäly avuksi metsätalouden päätöksentekoon.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsä ja Puu 1/1987: 8-11.		

<i>Year</i>	<i>Title</i>	<i>Refereed</i>	<i>Format</i>	<i>Author</i>	<i>Platform</i>	<i>Reference</i>	<i>Publisher</i>	<i>Source</i>
1987	Tuhohyönteisten ja sinistymän esiintyminen myrskyn kaatamissa puissa Lapissa 1983-86.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Folia Forestalia 696: 1-18.		
1987	Tutkimusaseman kehittämisestä.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.		Moniste, 4 s. 18.2.1987.	Metsäntutkimuslaitos, Rovaniemen tutkimusasema.	
1986	An artificial intelligence approach to animal behavior and resource utilization.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H., Packard, J.M. & Grant, W.E.	Abstracts of the 4th International Congress of Ecology. August 11-16, 1986. Syracuse, New York.			
1986	Avoiding moose damage in forest regeneration: an object-oriented model of animal behavior and a planning expert system.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.	Texas A&M University, Department of Computer Science. Symposium of artificial intelligence applications in forestry, March 11-13, 1986.	Manuscript 33 p.	U.S. Forest Service, Missoula, Montana.	
1986	Expert systems for diagnosis and prediction of bark beetle related forest management problems.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H. & Coulson, R.N.	18th IUFRO World Congress, Ljubljana, Yugoslavia. 7-21.9.1986.			
1986	Tekoölyn soveltamismahdollisuudet metsätaloudessa.	<input type="checkbox"/>	Slides	Saarenmaa, H.	Suomen Metsätieteellinen Seura, esitelmä 10.12.1986.			
1986	TOMICUS: Expert system for predicting bark beetle damage.	<input type="checkbox"/>	Data product	Saarenmaa, H.	Symbolics, IBM PC, LISP.			
1986	Topographical delimitation of Neodiprion sertifer (Hym., Diprionidae) outbreaks on Scots pine in relation to needle quality.	<input checked="" type="checkbox"/>	Published article	Niemelä, P., Rousi, M. & Saarenmaa, H.		Zeitschrift für angewandte Entomologie 103: 84-91.		
1985	A mechanistic simulation model for the movement and competition of bark beetle larvae (Coleoptera, Scolytidae).	<input checked="" type="checkbox"/>	Published article	Jong, M.C.M. de & Saarenmaa, H.		Ecological Modelling 27: 109-138.		
1985	Asiantuntijajärjestelmät erikoistietous käytännön ulottuville?	<input type="checkbox"/>	Published article	Saarenmaa, H.	Saastamoinen, O. & Poikajärvi, H. (toim.) Tietojärjestelmien kehittäminen metsäalalla. Metsäntutkimuspäivät Rovaniemellä	Metsäntutkimuslaitoksen tiedonantoja 196: 60-66.		
1985	Integroitu metsäuhojen hallinta = metsänsuojelun asiantuntijajärjestelmä.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.	Helsingin yliopisto, väitöstilaisuus 2.8.1985. Lectio precursoria.	7 s.		

<i>Year</i>	<i>Title</i>	<i>Refereed</i>	<i>Format</i>	<i>Author</i>	<i>Platform</i>	<i>Reference</i>	<i>Publisher</i>	<i>Source</i>
1985	Mikrotietokoneen käyttömahdollisuuksista perhostietojen hallinnassa.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Baptria 10(2): 57-59.		
1985	Mittarit, Geometroidea. Osa I, 260 s. Osa II, 280 s.	<input type="checkbox"/>	Editorial work	Mikkola, K., Jalas, I. & Peltonen, O. (avustaja)			Suomen Perhostutkijain Seura, Recallmed.	
1985	MOOSE: AI-based model for simulating moose behavior and damage.	<input type="checkbox"/>	Data product	Saarenmaa, H.	Symbolics, LISP, KEE.			
1985	The role of temperature in the population dynamics of <i>Tomicus piniperda</i> (Coleoptera, Scolytidae) in northern conditions.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Zeitschrift für angewandte Entomologie 99: 224-236.		
1985	Tietokoneavusteiseen päätöksentekoon ytimennävertäjätuhojen hallinnassa. Pystynävertäjän	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsä ja Puu 1985/10: 22-25.		
1985	Tilajärjestys kaarnakuoriaisten kilpailun selittäjänä.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Heinonen, J., Penttinen, A., Salminen, S. & Tomppo, E. (toim.) Seminaari spatiaalisen tilastotieteen soveltamisesta metsäntutkimukseen.	Metsäntutkimuslaitoksen tiedonantoja 194: 70-79.		
1985	Within-tree population dynamics models for integrated management of <i>Tomicus piniperda</i> (Coleoptera, Scolytidae).	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Communicationes Instituti Forestalis Fenniae 128: 1-56.		
1984	Automaattisen tietojenkäsittelyn mahdollisuudet entomologisten havaintotietojen hallinnassa.	<input type="checkbox"/>	Published article	Saarenmaa, H., Kaila, E. ja Kyrki, J.		Luonnon Tutkija 88: 154-163.		
1984	BBDB Bark Beetle Data Base.	<input type="checkbox"/>	Report	Saarenmaa, H.		METKA-projektin tiedonantoja n:o 15: 7 s., liitt.	Metsäntutkimuslaitos, Rovaniemen tutkimusasema.	
1984	BBDB: Bark Beetle Data Base.	<input type="checkbox"/>	Data product	Saarenmaa, H. & Kaila, E.	VAX, FORTRAN, TUTKA.			
1984	Lämpöolot ja perhosten fenologia Lapissa 1984.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Baptria 9(3): 73-74.		

<i>Year</i>	<i>Title</i>	<i>Refereed</i>	<i>Format</i>	<i>Author</i>	<i>Platform</i>	<i>Reference</i>	<i>Publisher</i>	<i>Source</i>
1984	Mauri-myrskyn seuraustuhot: ennakkotuloksia.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Sepponen, P., Pitkänen, V. & Poikajärvi, H. (toim.). Metsien kasvupaikkaluokitus. Metsäntutkimuspäivät Rovaniemellä	Metsäntutkimuslaitoksen tiedonantoja 148: 178-188.		
1984	Päätöksenteon tukijärjestelmät metsätalouden tietojärjestelmässä: kehitysnäkymiä.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.	Metsäalan organisaatioiden atk-päivät Rovaniemellä 6.11.1984.	Moniste 3 s.	Metsäntutkimuslaitos, Rovaniemen tutkimusasema.	
1984	Simulation of intraspecific competition of bark beetle larvae.	<input type="checkbox"/>	Abstract, slides	Saarenmaa, H. & Jong, M.C.M. de.	XVII International Congress of Entomology, Hamburg FRG, August 20-26, 1984.	Abstract Vol. p. 620.		
1984	Suotuisat sääsuhteet ja puiden pihkapitoisuus estivät suurtuhon.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Metsä ja Puu 1984/3: 54.		
1983	Ilmaston ja eläinten aiheuttamat metsätuhot Suomessa. Helsingin Yliopiston Metsänhoitotieteen laitoksessa säilytettävien	<input type="checkbox"/>	Published article	Saarenmaa, H.		Helsingin Yliopiston Metsänhoitotieteen laitoksen tiedonantoja 41: 1-		
1983	Modeling the spatial pattern and intraspecific competition in <i>Tomicus piniperda</i> (Coleoptera, Scolytidae).	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Communicationes Instituti Forestalis Fenniae 118: 1-40.		
1983	Myrskyt ja hyönteistuhot osa metsän luontaista dynamiikkaa.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Lapin Kansa 10.10.1983, s. 4.		
1983	Pallas-Ounas työryhmän mietintö.	<input type="checkbox"/>	Published volume	Numminen, E. & Saarenmaa, H. (toim.)		Metsäntutkimuslaitoksen tiedonantoja 125: 1-100.	Metsäntutkimuslaitos, Kolarin tutkimusasema.	
1983	Pystynävertäjän kehitys- ja kuolleisuusmallit Lapissa. Kehysmalli tutkimukselle.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.		Moniste 8.9.1983. 12 s., liite.	Metsäntutkimuslaitos, Rovaniemen tutkimusasema.	
1983	Valorystäpyynnin tuloksista Susimäen aarnialueella Ruovedellä.	<input type="checkbox"/>	Manuscript	Saarenmaa, H.	Havumetsäentomologian symposium Lammilla 25-26.3.1983.	4 s.		
1982	Havaintoja <i>Lycia lapponaria</i> n aktiviteetista.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Baptria 7(3): 71-76.		<a href="http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/geometridae/lycia/lappona">http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/geometridae/lycia/lappona</a>

<i>Year</i>	<i>Title</i>	<i>Refereed</i>	<i>Format</i>	<i>Author</i>	<i>Platform</i>	<i>Reference</i>	<i>Publisher</i>	<i>Source</i>
1982	Kaarnakuoriaisnäytteiden otto- ja käsittelyohjeet.	<input type="checkbox"/>	Manuscript	Saarenmaa, H. & Räisänen, H.		Moniste 25 s.	Metsäntutkimuslaitos, Rovaniemen tutkimusasema.	
1982	Taxonomy and ecology of <i>Cosmotriche lunigera</i> (Lepidoptera, Lasiocampidae) in Finland, with a description of a northern	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Notulae Entomologicae 62: 97-110.		
1981	Hallamittari kaluaa pohjoisen mustikkaa.	<input type="checkbox"/>	Published article	Saarenmaa, H. & Jalkanen, R.		Metsälehti 49(48): s. 9.		
1981	Ytimennävertäjien lisääntyminen ja torjuntamahdollisuudet Pohjois Suomessa.	<input type="checkbox"/>	Published article	Saarenmaa, H.	Metsäntutkimuspäivät Rovaniemellä 1981.	Metsäntutkimuslaitoksen tiedonantoja 6: 81-88.		
1980	Gastropacha quercifoliana (Lepidoptera, Lasiocampidae) esiintymisestä ja elintavoista Suomessa.	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Notulae Entomologicae 60(1): 11-16.		<a href="http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/bo mbycidae/gastropacha/">http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/bo mbycidae/gastropacha/</a>
1980	Onko <i>Cosmotriche</i> ( <i>Selenephera</i> ) <i>lunigera</i> lla kaksi alalajia Suomessa?	<input type="checkbox"/>	Published article	Saarenmaa, H.		Baptria 5(2): 41-44.		<a href="http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/bo mbycidae/cosmotriche/">http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/bo mbycidae/cosmotriche/</a>
1980	Piirteitä Kilpisjärven alueen perhosfaunasta.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Luonnon Tutkija 84(1): 54-55.		<a href="http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/arctiidae/acerbia/alpina.ht">http://home.swipnet.se/bioshare/life/invertebrata/insecta/lepidoptera/arctiidae/acerbia/alpina.ht</a>
1978	Havaintoja Keski-Lapin perhosista.	<input type="checkbox"/>	Published article	Saarenmaa, H.		Baptria 3(1): 1-4.		
1978	Kaarnakuoriaisten ( <i>Col.</i> , <i>Scolytidae</i> ) esiintyminen eräässä kanadanmajavan ( <i>Castor canadensis</i> Kuhl) aiheuttaman	<input checked="" type="checkbox"/>	Published article	Saarenmaa, H.		Silva Fennica 12(3): 201-216.		