



WINTER 2012 SEMINAR SERIES

TITLE: 25 years of Intercropping Research at the University of Guelph:
Can agroforestry systems really contribute anything at all to the
agricultural sector?

SPEAKER: Dr. Andrew Gordon

LOCATION: Room 1307-Thornbrough Bldg

TIME: 3:30 pm

DATE: February 15

ABSTRACT: Agroforestry is the planned and systematic integration of trees (either spatially or temporally) into farming systems in order to derive multiple benefits of an environmental, ecological, economic or social nature in a sustainable fashion. These benefits are derived as a result of a series of biophysical interactions that occur at the tree-crop (or tree-animal) interface.

Intercropping – or alley cropping – is one of several agroforestry systems that show promise in this regard with respect to the temperate agricultural biome. Drawing on over 25 years of field experimentation at the University of Guelph Agroforestry Research Station and other locales, this seminar will explore some of the pros and cons of adopting these systems on large scales. Aspects of nutrient cycling, energy flow, crop productivity, biodiversity, carbon sequestration and soil and water conservation will be highlighted within an ecosystem ecological perspective.

Biography: Andrew M. Gordon received his B.Sc.F. (Forest Environment) from the University of New Brunswick in 1978 and a Ph.D. (Forest Soils/Ecology) from the University of Alaska in 1985. Since 1984, he has been a faculty member in the Department of Environmental Biology (newly reformed as the School of Environmental Sciences), University of Guelph, Guelph, ON, where he currently holds the rank of full professor, and is Director of the Agroforestry Research and Development Program. His research interests lie in the investigation of ecosystem-level processes in both agricultural and temperate/boreal forest systems. He has spent considerable time developing and promoting agroforestry systems in temperate regions for their ameliorative and restorative properties. He has also been involved in a number of rehabilitation initiatives, both locally and globally (e.g. Nepal, Ghana, Argentina, Bolivia, etc.) including the use of both intercropping and riparian systems to reduce nutrient loadings to streams and other water systems. Dr. Gordon has a strong appreciation for the utilization of trees, forests and vegetation within the context of landscape level restoration of ecological processes. He is a licensed professional forester in the province of Ontario and a member of numerous professional organizations. He has also served as the Canadian representative to the International Energy Association (Short Rotation Biomass Fuels), is a former Theme Director of CRESTech's (an Ontario Centre of Excellence) Controlled Environments Research program, currently in collaboration with NASA to develop biological plant systems for extended space missions, and a former co-director of C.A.A.R.N. (the Canadian Afforestation and Agroforestry Research Network), at one-time, an emerging BIOCAP network. Dr. Gordon is the author and co-author of over 100 research publications in refereed and non-refereed journals, book chapters, technical communications, etc. He has advised over 50 M.Sc. and Ph.D. students, and is particularly proud of the fact that 8 (6 female) of his former graduate students hold professorial appointments at North American universities. He has served on numerous University of Guelph academic and administrative committees, and in 1997, won the 'Best of the Web' award for the best distance education course in North America. Dr. Gordon has considerable international experience in research, development and curriculum development in many countries and currently directs a long-term CIDA Tier 1 project in Ghana entitled: "Agroforestry practices to enhance resource-poor livelihoods in Ghana".