

CURRICULUM VITAE
Dr. Anthony B. Shaw
Professor (Emeritus)

Business Address

Department of Geography & Recreation and Tourism Studies
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FORMAL EDUCATION

Ph.D. & MA Department of Geography, The University of Western Ontario ,London, Ontario.
Honours Bachelor Degree, Department of Geography, Wilfrid Laurier,University, Waterloo, Ontario.

Thesis Titles

Ph.D. The Influence of Institutional and Structural Constraints on Agricultural Innovation Adoption
M.A. An Agroclimate Procedure for Rice Cultivation on the Coastal Plain of Guyana
B.A. Rainfall Variability and Its Effects on Rice Cultivation in Guyana

Teaching and Research Interests: applied climatology and meteorology, viticulture, vineyard site selection, wine appellation, freeze protection methods for specialty crops, climate change, building climatology, renewable energy and sustainability

PUBLICATIONS

1. A. B. Shaw (1982). An Agro-Climatic Procedure for Rice Cultivation on the Coastal Areas of Guyana, **Malaysian Journal of Tropical Geography**, Vol. 5, pp. 67-81.
2. A. B. Shaw (1984). Impact of New Technology on Guyanese Rice Industry: Efficiency and Equity Considerations, **The Journal of Developing Areas**, Vol. 18, pp. 191-217.
3. A. B. Shaw, and R. Da Costa (1985). Differential Levels of Technology Adoption and Returns to Scale in the Guyanese Rice Industry, **The Canadian Journal of Agricultural Economics**, Vol. 33, pp. 99-110.
4. A. B. Shaw (1985). Structural and Institutional Constraints on Agricultural Innovation Adoption, **Economic Geography Journal**, Vol. 61, pp. 25-45.

5. F. Berkes and A. B. Shaw (1986). Ecologically Sustainable Development: A Caribbean Fisheries Case Study., **Canadian Journal of Development Studies**, Vol. 7, pp. 175-196.
6. A. B. Shaw (1986). "A Statistical Analysis of Rain-Producing Systems on Coastal Guyana," in *Proceedings of the Third International Conference on Statistical Climatology, Vienna, Austria, A World Meteorological Organization Publication*, pp. 324 -335.
7. A. B. Shaw (1987). **An Analysis of Rainfall Regimes on the Coastal Region of Guyana.** *The International Journal of Climatology*, Vol. 7, pp. 291-320.
8. A. B. Shaw (1987). Approaches to Agricultural Technology Adoption and Consequences of Adoption in the Developing Countries: A Critical Review. **GEOFORUM**, Vol.18, pp. 1-19.
9. A. B. Shaw et al. (1988) **Feasibility Study for Assessing and Modelling Microclimatic Conditions on the Fonthill Kame (Phase 1).** Report prepared for the Ontario Ministry of the Environment, pp.1-59.
10. A. B. Shaw (1991) An Assessment Of Weather-Related Aviation Accidents In Canada . In, **Proceedings of the Fourth International Conference On Aviation Weather**, Paris, France, pp.19-22.
11. **A. B. Shaw (1992) An Assessment Of Land Use Impact On The Microclimate Of The Fonthill Kame.** Published Report Submitted to the Ontario Ministry Of the Environment, pp.1-144. Reviewed by four members of the original Study Team before publication.
12. **C. Chung and A. B. Shaw (1993). Effects of Mori Weedbags on the Container Growing Regime and Performance of Nursery Crops.** Horticultural Research Institute, Vineland. Ontario Ministry Of Agriculture, pp. 1-30.
13. **A. B. Shaw (1994) Climate Of The Niagara Region.** In Niagara's Changing Landscape H. G . Gayler, (ed.), Carleton University Press, Ottawa, pp. 111-137.
14. **A. B. Shaw (1995) Variability and Trends in Minimum, Maximum and Extreme Temperatures for the Niagara Region.** *In Proceedings of the Sixth International Conference On Statistical Climatology, Galway, Ireland*, pp. 307-310.
15. **A. B. Shaw**, and D.Yap with P. Summers, B. Thompson, M. Benjamin and S. Beauchamp(1996). **Geographical and Meteorological Factors Affecting Ozone in Canada.** In **Report of the Data Analysis Working Group: Ground Level Ozone and Its Precursors, 1980-1993**, Atmospheric Environment Canada, pp. 21-25. Refereed.
16. **A. B. Shaw**, D. Yap, W. Burrows, B. Thompson, M. Benjamin, S. Beauchamp and R. Tordon and P. Summers. (1996). Meteorological Characteristics of Regional Episodes. **In Report of the Data Analysis Working Group: Ground Level Ozone and Its Precursors, 1980-1993**, Atmospheric Environment Canada, pp.108-118. Refereed.

17. D. Xu, D. Yap and **A. B. Shaw (1996)**. Trends in Daily Maximum Ozone-Meteorologically-Adjusted., **In Report of the Data Analysis Working Group: Ground Level Ozone and Its Precursors, 1980-1993** Atmospheric Environment Canada, pp.223-227.
18. **A. B. Shaw**, P. Summers, B. Burrows, M. Benjamin, D. Yap J. Fuentes , B. Thompson, S. Beauchamp and R.Tordon. **(1996). Long-Range Transport. In Report of the Data Analysis Working Group: Ground Level Ozone and Its Precursors, 1980-1993**, Atmospheric Environment Canada, pp.253-267. Refereed.
19. **A. B. Shaw** with T. J. Griffis **(1996)**. A Meteorological Analysis of Ground Level Ozone for the Niagara Region, **Journal of Physical Geography, Vol.17. No.4 pp. 371-399. Refereed**
20. **A. B. Shaw (1997)**. **An Assessment of Growing Season Thermal and Moisture Environment for Timing Pest and Disease Control in Niagara Vineyards. In Proceedings of the Fourth International Symposium On Cool Climate Viticulture & Enology, Rochester, New York, July 17-20, 1996, III.10-III-15**
- 21.**A. B. Shaw (1999) The Emerging Wine Regions of Eastern Canada, The Journal of Wine Research, Vol. 10, No.2, pp.79-94.**
22. **A. B. Shaw (1999) A Micro-Climate Assessment of Preferred Areas 2, 3 and 4 of the Fonthill Kame Complex.** A Technical Report prepared on behalf of the Preservation of Agricultural Lands Society (PALS) for Ontario Municipal Board Hearing.
23. **A. B. Shaw (2001) Pelee Island and Lake Erie North Shore: A Climatic Analysis of Canada's Warmest Wine Region, Journal of Wine Research, Vol. 12, No. 1, pp.19.37.**
24. **A. B. Shaw and E. Bonnyman (2001) Determination of the Thermal and Moisture Behaviour of the Structural Insulated Panel.** A National Research Council/IRAP, Report prepared on behalf of Thermapan Industries Inc. Fonthill, Ontario, pp. 1-60.
25. **A. B. Shaw (2001) Wind Machine Technology to Optimize Vineyard Conditions.** A National Research Council/IRAP Report prepared on Behalf Of Reif Estate Winery, **Niagara-on-the-Lake, pp. 46.**
26. **A. B. Shaw (2002) A Climatic Assessment of the Niagara Peninsula Viticulture Area for the Application of Wind Machines, Journal Of Wine Research, Vol. 13, pp.143-164..**
27. **A. B. Shaw (2004) Delimiting Sub-Appellations within the Niagara Peninsula and Lake Erie North Shore Viticultural Areas,** Report prepared on behalf of the Vintners Quality Alliance Ontario, pp.55.
28. **Shaw. A.B (2004) Determining Sub-Appellations in Ontario Wine Regions. In Proceedings of the 28th International Conference on Viticultural Zoning, Cape Town South Africa, November 14-19, pp.27-34.**

29. **A.B. Shaw (2005) The Niagara Peninsula Viticultural Area: A Climatic Analysis of Canada's Largest Wine Region**, *Journal of Wine Research*, Vol.16, No.2, pp.1-19.
30. Vaudour, E and **Shaw, A.B.** 2005. **A Worldwide Perspective on Viticultural Zoning**, *South African Journal of Enology and Viticulture*, Vol.26, No.2, pp.106-115.
31. **Shaw. A.B** (2006) **A Climatic Characterization of the Sub_Appellations in the Niagara Peninsula Wine Region**. In *Proceedings of the VI International Congress on Terroirs Viticoles, Bordeaux and Montpellier, France, July 3-7*, pp.27-32.
32. Shaw, A.B. 2008. **A Comparative Analysis of Regions with Pinot Noir**. In *Proceedings of the VII International Congress on Terroirs Viticoles, Nyon, Switzerland, May19-23*, pp.142-148
33. Cyr, Donald, Kusy Martin, and Shaw A .B..2008. **Hedging Adverse Bioclimatic Conditions Employing a Short Condor Position**, *Journal of Wine Economics*, Vol.3, pp. 149-171.
34. Cyr, Donald, Kusy Martin, and Shaw A .B. 2008. **The potential use of weather derivatives in the viticulture industry**, *Economia & Diritto Agroalimentare*, Vol 13, Issue 3, p.67-82.
35. Cyr, D and Shaw, A.B.2010 **Impact of Global Warming on Ontario's Icewine Industry**. In *Proceedings of the VIII International Terroir Congress, Soave, Italy, June 14-18*, pp.3-9.
- 36.Cyr, D, Kusy M, and Shaw A .B. 2010. **Climate Change and the Potential Use of Weather Derivatives to Hedge Vineyard Harvest Rainfall Risk in the Niagara Region**, *Journal of Wine Research*, Vol.21, pp.207-227.
37. Shaw, A.B. 2012. **A Climatic Analysis of Wine Regions World Wide Growing Pinot Noir**. *Journal of Wine Research*, 23 ,3, pp. 203-228
38. **Shaw, A. B. 2012. Climate of the Niagara Region. Prepared for Environment Canada, pp.34 .**
39. Shaw, A. B. 2013. **A Climatic Analysis of the Niagara Peninsula Wine Appellation**. In *World of Niagara Wine*, Ripmeester, M., P. Mackintosh, and C. Fullerton (eds.) Waterloo: Wilfrid Laurier University Press .pp.143-164
40. Pickering, K, Plummer R, **Shaw, T** and Pickering G 2015. **Assessing the adaptive capacity of the Ontario wine industry for climate change adaptation**, *International Journal of Wine Research*, Vol. 2015, pp.13-27.
41. Shaw, A.B. 2017. **Climate change and the evolution of the Ontario cool climate wine regions in Canada**, *Journal of Wine Research*, Vol..28. No. 1 pp.13-45.

Major Work in Progress

- Sub-Appellations of the Niagara Peninsula Wine Region:An Annotated Atlas
- Climate change impacts and adaptation in Canada's wine regions
- Feasibility Study of Three agricultural crops for commercial production in Halton County (Funded by Industrial Assistance Research Program (IRAP) (December/2018 to November/2019

Technical Reports

T. J. Griffis and **A. B. Shaw**, 1994. **Analysis of Tropospheric Ozone and Relationship to Precursors, Meteorological Factors And Synoptic Types for the Niagara Region**, Department of Geography, Brock University.

Shaw. A.B (2001) **A Feasibility Study of the Application of Wind Machine Technology in Reduction of Freeze Injury to Grapevine**. Report prepared for the National Research Council/ IRAP (Industrial Assistance Research Program)

Shaw, A.B.(2002) **Precision-Methods for Vineyard Management**. Report prepared Harrow Estate Winery and funded by the Industrial Assistance Research Program (IRAP) of National Research Council of Canada.

Shaw, A.B. (2003). **A Model for Predicting Grapevine Phenology**. Report Prepared for Whitty Farms Limited. Funded by the Industrial Assistance Research Program (IRAP) of National Research Council of Canada.

Shaw, A.B. (2004) **A Methodology for the Strategic Siting of Wind Farms**. Report Prepared for Whitty Farms and Funded by the Industrial Assistance Research Program (IRAP) of National Research Council of Canada.

Shaw, A.B. (2008) **A Climatic Assessment of Huron County for Commercial Production of Vitis vinifera Grapes**. Report prepared for the Corporation of the county of Huron, pp.35.

Shaw, A. B. (2020) **An Evaluation of Growing Conditions for Temperate Apple Varieties at the Finnigan the Acre site in Halton County**. Report prepared for Finnigan Acres Inc. and funded by the the Industrial Research Assistance Program (IRAP) of the National Research Council of Canada, pp.53.

Shaw, A.B. (2020). **Climatic Assessment of Agricultural Lands for Commercial Hops Production at the Finnegan Acres' Site in Halton County**. Report prepared for Finnigan Acres Inc. and funded by the the Industrial Research Assistance Program (IRAP) of the National Research Council of Canada, pp.38.

Shaw, A.B. 2020. **Climatic Assessment of Agricultural Lands for Commercial Grape Production at the Finnegan Acres' Site in Halton County**. Report prepared for Finnigan Acres Inc. and funded

by the the Industrial Research Assistance Program (IRAP) of the National Research Council of Canada, pp. 51.

Papers Presented At International, Regional and Local Conferences

A. B. Shaw (1983). **Problems of Agricultural Development in Third World Countries.** Paper presented at Geography Teachers Day, Wilfrid Laurier University.

A. B. Shaw (1983). **Constraints on Agricultural Innovation Adoption: Case Study of the Diffusion of High-Yielding Varieties of Rice in Guyana.** Presented at the Fifth Annual Conference of the Association of Caribbean Studies, Curacao.

A. B. Shaw and Richard Da Costa, (1983). **Differential Levels of Technology Adoption. Policy Implications for Agricultural Development Planning in Guyana.** Presented at the Fifth Annual Conference of the Association of Caribbean Studies, Curacao.

A. B. Shaw (1984). **Consequences of Technology Adoption in Less Developed Countries.** An invited paper given at the Ninth Annual Conference of the Caribbean Studies Association, St. Kitts, West Indies.

A. B. Shaw (1986). **A Statistical Analysis of Rain-Producing Systems on Coastal Guyana.** Presented at the Third International Conference on Statistical Climatology Vienna, Austria.

A. B. Shaw (1986). **A Climatological Assessment of the Dispersion of Airborne Pollutants from an Elevated point source over the Niagara Region: re-OWMC waste treatment facility.** Paper presented at the meeting of the Canadian Association of Geographers of Ontario, Carleton University, Ottawa.

A .B. Shaw (1988). **A preliminary study of weather-related accidents in the Canadian Aviation Industry.** Presented at the Annual Meeting of the Association of American Geographers, Phoenix, Arizona.

A. B. Shaw (1988). **Land Use Impact on the Microclimate of the Fonthill Kame.** Presented at the Technology Transfer Conference. Sponsored by Research Technology Branch of Environment Ontario, Toronto.

A. B. Shaw (1990). **Sustainable Development in the Third World: Some Bootstrap Principles.** Presented at the Symposium, Bruce Peninsula District School, May 10 - 11, 1990.

A. B. Shaw (1991). **An Assessment of Weather-related Aviation Accidents in Canada,** Fourth International Conference on Aviation Weather June, 1991, Paris, France.

A. B. Shaw, (1995) **Variability and Trends in Minimum, Maximum and Extreme Temperatures for the Niagara Region.** Presented at the Sixth International Conference on Statistical Climatology, Galway, Ireland, June 19-23.

Shaw, A.B 1995. Meteorological Characterization of Ground Level Ozone: Synoptic Typing. Presentation at Meeting of NOx/VOC Science Program, Atmospheric Environment Service, Downsview, Toronto, October 2 -3, 1995.

Shaw, A.B (1996) **An Assessment of Growing Season Thermal and Moisture Environment for Timing Pest and Disease in Niagara Vineyards.** Paper presented at the Fourth International Symposium On Cool Climate Viticulture & Enology, Rochester, New York, July 17-20.

A.B, Shaw (1997) **A Comparative Analysis of Winegrape Climates in Canada.** Paper presented at the Meeting of the Canadian Association of Geographers, August 19-23, 1998, St. Johns, Newfoundland, Canada.

Shaw, A.B (1998) **A Climatic Analysis of Southern Ontario for the Cultivation of Rhododendron Species.** An Invited Paper presented at the International Meeting of the American Rhododendron Society, Niagara Falls, Ontario, May 27-30, 1998.

Shaw, A.B (1998) **Storms Over Niagara.** An Invited Paper presented to The St. Catharines Historical Society, The St. Catharines Public Library, April 2.

Shaw, A.B (2000) **Global Warming and Its Impacts on Niagara's Agriculture.** An Invited Paper presented at the 2000 Convention of the Niagara Peninsula Fruit and Vegetable Growers' Association, Brock University, February 23-24.

Shaw, A.B (2003) **An Analysis of Radiation Inversions for the Use of Wind Machines in Southern Ontario,** Canada. Paper Presented at the 99th Annual Meeting of the Association of American Geographers, March 5-8, New Orleans, LA.

Shaw, A.B. (2004) **Determining Sub-Appellations in Ontario's Wine Regions,** Presented at the Centennial Annual Meeting of the Association of American Geographers, Philadelphia, March 14-19.

Shaw. A.B (2004) **Use of Wind Machine For Freeze Protection,** Presented at the Innovations In Wine Making and Grape Growing, CCOVI, Brock University, December 16.

Shaw, A.B (2004) **Developing Sub-appellations in the Niagara Peninsula Viticultural Area,** CCOVI Grape and Wine Research Seminar Series, Brock University, October 14, 2004.

Shaw, A.B (2004) **Proposed Niagara Peninsula Sub-Appellations,** Presented at Grape and Wine Research Seminar Series, CCOVI, Brock University, October 14.

Shaw, A.B (2004) **Developing Sub-Appellations in the Niagara Peninsula Viticultural Area,** Presented at the 28th International Conference on Viticultural Zoning, November 15 to 19, Cape Town, South Africa,

Shaw, A.B (2004) **Identification of Vineyard Micro-Climate and the Use of Wind Machines to Reduce Winter Injury**, Presented at National Research Council and Prince Edward County Winery Association Meeting, Picton, Prince Edward County, Ontario, December 7.

Shaw, A.B (2005) **Teaching Wine in Higher Education**. Presented at the Annual Meeting of the Association of American Geographers, Denver, Colorado, April 4-9.

Shaw, A.B (2005) **Viticultural Zoning Methods in the New World Versus the Old World**, Second Interdisciplinary and International Wine Conference, Beaune-Dijon, Bourgogne, France, November 3-5, 2005.

Shaw, A.B (2006) **Viticultural Zoning in the Niagara Peninsula Wine Region**. Presented at the Annual Meeting of the Association of American Geographers, Chicago, Illinois, March 7-11.

Shaw, A.B (2006) **A Climatic Characterization of the Sub-Appellations in the Niagara Peninsula Wine Region**. Presented at the VIth International Terroir Congress, Bordeaux-Montpellier, July 2-7.

Shaw, A.B (2007) **Topographic and Climatic Analysis of Niagara's Sub-Appellations**. Presented at the Annual Meeting of the Association of American Geographers, San Francisco, California, April 17-21, 2007.

Shaw, A.B (2007) **Impact of Land Use and Environmental Regulations on the Wine Industry**. Panel Discussion. Annual Meeting of the Association of American Geographers, San Francisco, California, April 17-21, 2007.

Shaw, A.B. (2007) **A Climatic Analysis of Cool Climate Wine Regions Growing Pinot Noir**. Presented at Bacchus at Brock, the 3rd International Interdisciplinary Wine Conference, Brock University, St.Catharines, Ontario, Canada, June 7-9, 2007.

Shaw, A.B. (2008) **Viticulture Zoning**. Presented at Salbro-Invitro Symposium. Invited Presentation. Niagara-on-the lake, Ontario

Shaw, A.B. (2008) **Climatic trends in Ontario's Wine Regions**. Industry Presentation, Cool Climate and Enology and Viticulture Institute, Brock University, St. Catharines, March,12,2008

Shaw, A.B. (2008) **Climatic Analysis of Pinot Noir Wine Regions**, Annual Meeting of the Association of American Geographers, Boston , MA , April 15-19, 2008.

Shaw, A.B. (2008) **Implications of Climate Change for the Wine Industry**, Presented at the Workshop, entitled Adapting to Climate Change in the Niagara Region of Ontario, Sponsored by the Ontario Centre for Climate Change and Adaptation Resources, May, 14, St. Catharines, Ontario.

Cyr, D, M. Kusy and A. B. Shaw, **"The Potential Use of Weather Derivatives to Hedge Harvest Rainfall Risk: An Application"** Wine in the World: Markets,

Tourism and Globalisation, Third International Conference on Economics, Management Sciences and History of Wine, Bordeaux June 5-7th, 2008.

Cyr, D. M. Kusy and **A. B. Shaw**, “**Hedging Vineyard Losses Due to Harvest Rainfall: An Application of Weather Derivatives**”, 4th International Conference of the Academy of Wine Business Research - Siena, 17-19 July, 2008.

Cyr, D., M. Kusy and **A. B. Shaw**, “**Hedging Adverse Bioclimatic Conditions Employing a Short Condor Position**”, 2nd Annual Conference of the American Association of Wine Economists, August 14-16, 2008, in Portland, Oregon.

Shaw, A.B. **Impact of Global Warming On Ontario’s Ice Wine Industry**. Presented at the Annual Meeting of the Association of American Geographers, Las Vegas, March 22-27, 2009.

Cyr, D., M. Kusy and **A. B. Shaw**, **Hedging the Risks of Vineyard Winter Injury with an OTC Collar Contract**. 3rd Annual American Association of Wine Economics Conference, Reims, Champagne, France, June 18-20, 2009.

Cyr, D and Shaw, A.B. **Impact of Global Warming on Ontario’s Icewine Industry**. The VIII International Terroir Congress, Soave, Italy, June 14-18, 2010.

Shaw, A.B. 2011. **Impact of Climate Change on Ontario’s Wine Industry: the Good and Bad News**, CCOVI Lecture Series, February 15, 2011. Disseminated by WEBCAST and Cogeco Cable TV.

Shaw, A.B. 2011. **Global Warming and Impacts on the Niagara Wine Region**. Presented at the Annual Meeting of the Association of American Geographers, Seattle, Washington, April 12-16, 2011.

Shaw, A.B. **The Climate of the Niagara Region**. Presented at Climate Science Symposium, Co-sponsored by the University of Toronto, Brock University, Environment Canada and the Toronto Urban Climate Change Network, April 29 to 30, 2011.

Shaw, A.B. **Climate Adaptation Activities in Ontario’s Wine Industry**. Presented at Climate Science Symposium, Co-sponsored by the University of Toronto, Brock University, Environment Canada and the Toronto Urban Climate Change Network, April 29 to 30, 2011.

Cyr, Don, **M. Kusy** and **A. B. Shaw** (2011). The Potential Use of Copula Functions in Modelling Critical Weather Variables in Viticulture: An Application to the Niagara Region of Canada. Presented at the American Association of Wine Economists 2011 Conference Bolzano, Italy.

Shaw, A.B. 2012. **Profiling Pinot noir climates worldwide**. Presented at the 8th International Cool Climate Symposium, Hobart, Tasmania, Australia, Jan. 31 to Feb.4, 2012.

Shaw, A.B. 2012. The Effects of Climate Change on the Ontario wine Regions. Presented at the Bruce Duncan Memorial Lecture Series, Giant Rib Discovery Centre, Hamilton, Ontario, May 13, 2012.

Shaw, A.B. 2012. **The Impact of Climate Change on Established and Emerging Wine Regions of Ontario, Canada.** Presented at the XIX Enometric Conference Coimbra & Viseu, Portugal, May 30-June 2, 2012.

Shaw, A.B. 2013. Climate effects on grape growing and wines, and climate adaptation as it relates to Vineyards and Wines. Conducted at Smithsonian Conservation Biology Institute Center for Conservation Education and Sustainability, National Zoological Park, 1500 Remount Road, Front Royal, VA

Shaw, A.B. **2014. Climate Extremes and Impacts on Cool Climate Wine Regions of Ontario, Canada.** Presented at the Annual Meeting of the Association of American Geographers, Tampa, Florida, April 8-12, 2014.

Shaw, A.B. 2014. **Role of Appellation and Sub-Appellation in the promotion of agro-tourism: Adaptive Strategies for Island States.** Presented at the Global Environmental Change and Small Island States and Territories: Economic and Labour Market Implications. Valletta, Malta, December 1-5, 2014.

Shaw, A.B. 2015. **Climate change in Ontario's Wine Appellations: Risks and Opportunities.** Presented at the Niagara Fruit and Vegetable Growers' Convention.

Shaw, A.B. 2015. **Volatility in the Evolving cool climate wine regions of Ontario.** Presented at CCOVI Lecture Series

Shaw, A.B. 2015. **Climate Change and Variability in Ontario's Wine Appellations.** Presented at American Association of Wine Economists, Mendoza, Argentina, May 25-30, 2015.

Shaw, A.B. 2016. **Climate Change, Volatility and Impacts and Adaptive Strategies in the Cool Climate Wine Regions of Canada,** Presented at the Annual Meeting of the Association of American Geographers, San Francisco, California, April 8-12, 2016.

Shaw, A.B. 2016. Climate Change and the Evolution of Canada's Wine Appellations. Presented at the 39th World Congress of Vine and Wine, Bento Gonçalves, Brasil, October 23 to 28th.

Shaw, A.B. 2017. Climate Change and the Evolution of Canada's wine appellations and emerging areas: Challenges and Benefits, CCOVI Lecture Series, Brock University, March, 15, 2017.

Shaw, A.B. 2017. Climate Change , Risks and Opportunities for Agriculture in Haldimand and Norfolk Counties, Ontario, TD Canada Trust, Welland Port Community Center. April 2017.

Shaw, A.B. 2017. Climate Change in Canada's Wine Regions, Presented to Parliamentary Senate Committee On the Study of the Potential Impact of the effects of climate Change on the Agriculture, Agri-food and Forestry Sectors, Ottawa, September 21, 2017.

Major Work in Progress

- Sub-Appellations of the Niagara Peninsula Wine Region: An Annotated Atlas
- Climate change impacts and adaptation in Canada's wine regions
- Feasibility Study of Three agricultural crops for commercial production in Halton County (Funded by Industrial Assistance Research Program (IRAP) (December/2018 to November/2019)

Teaching Activities and Courses Taught

- **COURSES**

- Geog. 1F91 Introductory Physical Geography
- Geog. 2P04 Introductory Meteorology
- Geog. 3P81 Environmental and Developmental Problems
- Geog. 3P10 Applied Climatology
- Geog. 3P56 Physical Geography Field Course
- Geog. 4P12 Advanced Climatology
- Geog. 4P13 Climatic Hazards
- Geog. 3F95 Greek Viticulture and Wines
- Geog. 3F91 Environmental and Developmental Issues in Thailand
- UEST 3V93 Interdisciplinary Perspectives on Pollution (Atmospheric)
- UEST 3V97 Perspectives in Urban and Environmental Studies:
- Geog. 3P12 Climate and Grapewine Production
- Geog.4F99 Honours Internship
- Geog.5P30 Sustainability and the Environment
- Geog.5P60 Vulnerability, Human Communities and the Environment