

Brent Tegler PhD

PERSONAL DATA

Citizenship: Canadian

Languages: English, MelanAsian Pidgin, West African Krio

Birthdate: 14 April 1954

EDUCATION

Ph.D. University of Guelph (1993), Doctor of Philosophy, Ecology

M.Sc McMaster University (1980), Master of Science, Ecophysiology

B.Sc University of Toronto (1977), Bachelor of Science, Honours Ecology

APPOINTMENTS

Special Graduate Faculty University of Guelph, School of Environmental Design and Rural Development

Senior Associate The Heron Group international consulting team

CAREER SUMMARY

North-South Environmental Inc. (1999 to present), Applied Ecologist & Partner

North-South addresses the varied needs of sustainable landscape planning related to wildlands, sustainable forestry, agriculture lands and urban lands. North-South Environmental Inc. emphasizes the development of environmental management designs that meet human needs within landscapes that maximize the ecological integrity of self-sustaining natural systems with high native species diversity.

Geomatics International Inc. (1991 to 1999), Applied Ecologist

Applied terrestrial ecologist specialising in the description and interpretation of biological features and processes in natural and anthropogenic landscapes. Duties include report writing, project management, field work and data analysis. Project areas include sustainable forest management, environmental impact assessment, protected areas selection and design, cumulative effects monitoring, rare plant monitoring, environmental restoration, fire management and non-formal education.

Western Province, Solomon Islands (1993 to 1995), Environment Officer

Environmental Advisor to the government and people of Western Province to assist with the development of resource management policies, impact studies, legislation and environmental education programs.

University of Guelph (1987-1991), Ph.D. graduate student

Ph.D. student in the Departments of Environmental Biology and Geography at the University of Guelph. Thesis topic: Vegetative control of wind erosion in the

Sahel Region of West Africa.

Ontario Ministry of Natural Resources (1986-1987), Research Plant Ecologist

Researcher and author of a report on the role of fire in the ecology of the vegetation of Pinery Provincial Park leading to the preparation of a five year prescribed burn plan for the restoration of Oak Savanna in the Park.

Papua New Guinea Forestry College (1983-1985), Head of Botany Department

Administrator of Botany Department, including staff, arboretum, herbarium and research. Supervised and taught ecology, dendrology, introductory botany, soils and geology, and wildlife biology. Conducted ecology field trips in wilderness environments with college students.

University of Sierra Leone, Africa (1981-1983), Ecology Lecturer

Responsible for lecturing and curriculum development of courses in Introductory and Advanced Ecology and field courses in the Ecology of Savanna Woodland.

World Wildlife Fund-US (1982-83), Research Botanist

Field research report prepared on the vegetation of Kilimi National Park, Sierra Leone.

INTERNATIONAL FIELD EXPERIENCE

Senegal training staff from Senegalese non-government organizations in the use of GeoNetWeaver NRM analysis software to assess and monitor ongoing development projects in Community Based Natural Resource Management.

Nigeria over a three-year period completed field studies involving a nation-wide forest resource inventory in mangrove, swamp, tropical high forest and savannah ecosystems leading to preparation of sustainable forest management plans.

Solomon Islands two years as an in-country advisor developing and implementing resource management guidelines, environmental education awareness programs and environmental legislation for sustainable use of tropical forest and marine ecosystems.

Mali three field seasons completing an ecological description of sahel vegetation and recording measurements of near surface wind-flow for research on desertification.

Papua New Guinea two and one half years as head of the botany section of the PNG Forestry College leading to field studies in the ecology of tropical montane systems, and environmental impact assessments of logging and mining

operations.

Sierra Leone two years as senior lecturer at the University of Sierra Leone included field studies on the ecology and management of Guinea Savannah for the country's first national park and environmental impact assessments of bauxite and rutile mining operations.

PROJECT EXPERIENCE

Ecological Monitoring

- Developing a Monitoring Strategy for forests in the Region of Halton. 2005 (ongoing)
- Enhancing Community Based Monitoring in Canada: Exploring the role of Environment Canada. 2004
- Monitoring Fire Management at Rondeau Provincial Park – 2002
- Criteria and Indicators to Monitor Sustainable Ecosystem Management - 2002
- Developing an Approach to Inventory, Monitor, Assess and Report on Long Term Ecological Health and Integrity and the Cumulative Effects of Human Activities in Ontario's Provincial Parks and Conservation Reserves – 2001
- Torrance Creek Sub-watershed Plan Monitoring Strategy - 2001
- Core Monitoring Variables for Tracking Ecosystem Change - 2001
- Workshop on Cumulative Effects Assessment and Management, 1999
- Efficacy Testing of Core Monitoring Variables. 1999
- Selecting Core Monitoring Variables for Tracking Ecosystem Change at EMAN Sites. 1999
- Niagara Escarpment Cumulative Effects Monitoring. 1996
- Rare Plant Monitoring Program - Georgian Bay Islands National Park. 1992

Natural Areas Evaluation and Management

- Significant valleylands study in the Region of Waterloo. 2005 (ongoing)
- Significant woodland study in the Region of York. 2005 (ongoing)
- Assessing the significance of woodlands in the rural areas of the City of London. 2005 (ongoing)
- Ecological Land Classification in the Hudson Bay Lowlands. 2004
- Ondo State (Nigeria) Ecologically Sensitive Area Study - 2003
- Killarney Signature Site Detailed Life Science Inventory – 2003
- Development of a Tallgrass Prairie and Savannah Prescribed Fire Expert System – 2002
- Management Framework for Cruickston Park, Cambridge, Ontario – 2001
- Evaluation of the Ecological (Life Sciences) Values of the Lake Nipigon Basin Provincial Parks/Conservation Reserves/Enhanced Management Areas – 2001
- Algoma Headwaters and Adjoining Waterway Provincial Parks and Spanish River Provincial Park Including Biscotasi Provincial Park Life Science Study Report – 2001

- Importation Control of Alien Species Entering Canada. 2000
- Integrated Protected Areas and Conservation Management in Romania. 1997- 1998.
- Georgian Bay Islands Greater Park Ecosystem Study. 1994-1998
- Rouge Park Vegetation Management Plan. 1996
- Gap Analysis and Candidate Area Selection for Life Science Representation in Site District 4E-3. 1994
- Evaluation of Environmentally Sensitive Area Program in Halton R.M. 1990-1993.
- Identification and Prioritization of Wetland Habitats in Georgian Bay Islands N. P., 1993.
- Zone 1 and Environmentally Sensitive Site Designation - St. Lawrence Islands N. P. 1992.
- Zone 1 and Environmentally Sensitive Site Designation - Georgian Bay Island N.P. 1991.
- Massasauga Wildlands Provincial Park Supplementary Life Science Inventory. 1991.

Ecosystem Modelling

- Parks Canada development of conceptual ecosystem Model Training package for key park ecosystems within Canada 2005 (ongoing)
- Parks Canada development of park-wide conceptual ecosystem models for Bruce Peninsula National Park, Fathom Five National Marine Park, and Georgian Bay Islands National Park 2005 (ongoing)
- Training workshop for USAID in Senegal creating conceptual models for sustainable development projects using GeoNetWeaver decision support software. 2004.

Natural Heritage Systems

- North Oakville Natural Heritage System 2005
- North Pickering Land Exchange Natural Heritage System 2004-2005
- Richmond Hill Corridors Study. 1998
- St. Clair Natural Heritage System. 1997.
- Rouge Duffins Natural Heritage System. 1996.

Sustainable Forest Management

- Caribou Forest Independent Forest Audit 2004
- Spanish Forest Independent Forest Audit 2005
- Ogoki Forest Independent Forest Audit 2005
- Local Unit Criteria and Indicator Development Test for USDA Forest Service 1999-2002
- Assessing the Role Forests in Parks and Protected Areas and Private Woodlands in meeting Canada's objectives under the Kyoto Protocol. 2003.
- Forest Resources Study - Nigeria 1996-1999
- Code of Logging Practice Solomon Islands 1995

Ecological Restoration

- Restoration of DiBiase property watercourse 2005
- Brighton Beach Power Ecological Restoration. 2003.
- Vegetation Restoration Planning. Sandbanks Provincial Park. 2003
- Red Cedar Savannah Restoration Plan - Point Pelee National Park. 1993-1994

Sustainable Urban Environments

- York District Secondary Plan Development 2005 (ongoing)
- Mitchell Farm Phase II, Stage 1 Environmental Implementation. 2001
- Review of Cawthra Woods Urban Forest Management Plan. 1996
- Huron Environmental Area Co-operative Project, Kitchener. 1992

PROFESSIONAL PUBLICATIONS AND PAPERS

Tegler, B. 2005. The Role of Industry in Community Based Monitoring. In: Doyle, M. and Lynch, M. (eds.). 2005. *Linking Ecological Monitoring to Decision-Making at Community and Landscape Scales*. Published by The Ecological Monitoring and Assessment Network Coordinating Office, Environment Canada, Burlington, Ontario, Canada.

Tegler, B. 2004. Woodland Management for Ecological Values. Paper prepared for the Carolinian Canada Conference, Kings College, London ON, May 11, 2004

Tegler, B. 2003. Science in Support of Community and Landscape/Seascape Sustainability: Concepts of Sustainability. Paper prepared for the EMAN National Science Meeting, Halifax, NS, November 28, 2003.

Tegler, B. 2003. Tallgrass Prairie and Savanna Prescribed Fire Decision Support System. Paper prepared for Tallgrass Ontario Conference, Ridgetown College, Ridgetown ON, 2003.

Tegler, B. 2003. Monitoring Forest Management Unit Scale Sustainability. Paper prepared for the World Forestry Congress, Quebec City PQ, Sept 20-28, 2003.

Tegler, B. and Brdar, C. 2003. Vegetation Restoration Planning at Sandbanks Provincial Park. 2003 PRFO Proceedings. Heritage Resources Centre, University of Waterloo.

Wright, P., Alward, G., Hoekstra, T.W., Tegler, B., and Turner, M. 2002. Monitoring for Forest Management Unit Scale Sustainability: The Local Unit Criteria and Indicators Development (LUCID) Test. Technical Edition, Fort Collins, CO: USDA Forest Service Inventory and Monitoring

Report No. 4. 370p.

- Johnson, M. A. and Tegler, B. 2002. Monitoring Fire Management of Oak Savanna and Tall Grass Prairie in Rondeau Provincial Park. 2002 PRFO Proceedings. Heritage Resources Centre, University of Waterloo, pp 269-282.
- Akindede, S. O., J. Dyck, B. Tegler, F. F. Akindunni, P. M. Papka and O. A. Olaleye (2001). *Estimates of Nigeria's Timber Resources*. **In:** Popoola, L., J. E. Abu and P. I. Oni (Editors). *Forestry and National Development*. Proceedings, 27th Annual Conference of Forestry Association of Nigeria, Abuja, Nigeria September 17 – 21, 2001. pp. 1 – 11.
- Sharp, M. and Tegler, B. 2001. An Approach for Monitoring in Ontario's Provincial Parks and Protected Areas. Ecological Integrity and Protected Areas, 2001 PRFO Proceedings. Heritage Resources Centre, University of Waterloo, pp 363-369.
- Tegler, B., M.J. Sharp and M. Johnson. 2001. Ecological Monitoring and Assessment Network's Proposed Core Monitoring Variables: An Early Warning of Environmental Change. Environmental Monitoring and Assessment vol. 67, pp 29-56.
- Tegler, B., M.J. Sharp and M. Johnson. 1999. Georgian Bay Greater Park Ecosystem: A bio-regional approach to conservation. Paper presented to the Parks Research Forum of Ontario Conference, April 22nd, 1999, Guelph, Ontario.
- Tegler, B and D. Ramsay. 1998. Terrestrial Ecology Monitoring and Regional Landscape Planning: The Niagara Escarpment Experience. Paper presented at the Natural Areas Association Conference, October 6-10, 1998, Mackinac Island, Michigan.
- Tegler, B. and J. Robinson. 1995. Western Province Resource Management Ordinance. Gizo, Solomon Islands, 24pp..
- Tegler, B. 1995. Forest Management Policy, Western Province, Solomon Islands. 4pp..
- Tegler, B. 1994. Canary in a Coal Mine: Environmental Change in the South Pacific. Environmental Video, 31min.
- Tegler B. 1990. Measurement of wind profiles in plant communities of Mali, West Africa. Paper presented to the Canadian Association of Geographers in Ontario, February 1990.

- Tegler B. 1990. Desertification: Is the cause climate or human? Video presentation produced for CUSO Guelph, 57min.
- Tegler B. 1984. Woody Regeneration in Anthropogenic Grassland, Papua New Guinea. Conference paper, Ninth meeting of PNG Botanical Society, Madang, Papua New Guinea.
- Tegler B. & Kershaw K.A. 1981. The Seasonal Variation of the Heat Stress Response of *Cladonia rangiferina*. *New Phytologist* v.87, pp395-401.
- Tegler B. & Kershaw K.A. 1980. The control of seasonal rates of net photosynthesis by moisture, light, and temperature in *Cladonia rangiferina*. *Canadian Journal of Botany*, v.58(17), pp1851-1858.