

**Qualifications and Experiences:**

I have over 20 years of experiences in biological research, plant development, habitat restoration and environmental monitoring. Presently, I manage several projects which explore and develop new methods of enhancing restoration successes. Examples:

Identifying Key Native Species and Efficient Strategies for Revegetating Sensitive Landscapes: Oil sand Areas, Saline Areas, Boreal Forest and Foothills Regions

Fire Behaviour - test the ignition potential and fire behaviour of seven species native to Alberta to determine their relative flammability.

Resilient native species for the Canadian Military - Testing native species that can withstand heavy traffic area and equipment in the Canadian Forces Base Wainwright.

Revegetation of fescue grassland on well sites disturbances in east central Alberta - Evaluating seed mixes that can be used to revegetating wellsite disturbances and pipelines.

Phytoremediation of salt affected soils - Determining the suitability of native species in remediating salt affected and hydrocarbon contaminated sites.

Rangeland health assessment of reclaimed wellsites - Can the ASRD rangeland assessment tool be applied to reclaimed wellsites and pipelines

New Native Plant ecotypes for the reclamation of disturbances in the Northwest Territories

Bioethanol - evaluate feedstock for adaptation and cellulose and hemi-cellulose content to support an alternate fuel industry and for biorefining.

Natural Health Product - develop exploratory skills and seek new market opportunities in the Natural Health Product area

Native species for the sandy soils - develop source identified cultivars and revegetation seed mixes for revegetation of disturbances in the sandy soils of Alberta.

Evaluation of low maintenance turf species - Test various native grasses as a low input alternative.

Development of dryland forages adapted to changing weather patterns - Determining the value of native forages to traditional forages.

Evaluation of new native seed mixes for roadsides vegetation - Reducing roadsides maintenance, including mowing and fertilizer.

Western Forage Variety Testing Provenance - Test various tame forages and grasses for their adaptability to local environments.

### **Alberta Research Council**

1999 - present	Project Leader, Native Plants and Habitat Restoration	Alberta Research Council	Vegreville, AB
1987 - 1999	Senior Technician Native Plants and Habitat Restoration	Alberta Research Council	Vegreville, AB

### **Education & Training:**

University of Nebraska	Institute of Agriculture & Natural Resources	Master in Agriculture (Plant breeding & Agronomy)	2005
University of Alberta	Agriculture Forestry	BSc Agriculture	1986
University of Alberta	Faculte St-Jean	BSc General	1983

### **Licenses**

1. Plant Breeder as granted by Canadian Seed Growers Association. 2003-present.
2. Associate plant breeder as granted by Canadian Seed Growers Association, August 1998- August 2003
3. Principal Agrologist. 1991-present.
4. Safety Auditor. 1995.

### **Professional Associations:**

Canadian Society of Agronomy  
Alberta Institute of Agrologist  
Association for the Advancement of Industrial Crops  
Canadian Land Reclamation Association  
Canadian Seed Growers Association  
Crop Society of America  
Society for the Advancement of Industrial Crops  
Canadian Society of Agronomy

### **Honours and Awards**

The Native Plant program was recognized by the Alberta Sustainable Resources Development for its collaboration with Pat Porter, Public Lands Wainwright Office at the 2006 ASRD Employee Recognition Day. November 2006. Fort Edmonton Park. Edmonton.

The Native Plant Development Team received the 2004 Alberta Chamber of Resources Major Reclamation Award.

The Native Plant Development Team was the recipient of the 2003 Emerald Awards for Environmental Excellence- Research & Innovation Category.

The Native Plant Development Team was a finalist at the 2003 Growing Alberta Leadership Award in Environmental stewardship.

On February 24, 2003, I was recognized in the Alberta Legislature for my involvement and interest in the process of making *Festuca scrabella*, the official grass of Alberta.

On September 19, 1996, the Native Plant Development Team received the Dr Edward M. Watkin Award of Merit for Outstanding Contribution to the Betterment of Land Reclamation.

We also received the Alberta Environment Award for Excellence in Environmental Science and Technology for the development of AEC-Highlander, a native grass for reclamation. June 1993.

### **Patents/Variety Releases**

Released 16 native grasses and legume varieties for the reclamation, revegetation and restoration of disturbed sites.

### **Publications**

#### **Published refereed articles**

Woosaree, J., Acharya, S.N and Darroch, B.A. 2004. ARC Sentinel spike trisetum. Can. J. Plant Sci. Vol 85:403-406.

Woosaree, J., Acharya, S.N and Darroch, B.A. 2003. ARC Mountain View June grass. Can. J. Plant Sci. Vol 84:245-247.

Jefferson, P.J; McCaughey, W.P.; May, K.; Woosaree, J.; McFarlane, L. and Wright, S.M.B. 2003. Potential utilization of native prairie grasses from western Canada as ethanol feedstock. Can. J. Plant Sci Vol 84:1067-1075.

Jefferson, P.J; McCaughey, W.P.; May, K.; Woosaree, J.; McFarlane, L. and Wright, S.M.B. 2003. Forage quality of seeded native grasses in the fall season on the Canadian prairie provinces. Can. J. Plant Sci. Vol 84:503-509

Darroch B.A., Acharya, S.N., and J. Woosaree. 2002. Variety description of AEC Glacier alpine bluegrass. Can. J. Plant Sci. 82:95-98.

P.G. Jefferson, W.P. McCaughey, K. May, Jay Woosaree, L. McFarlane, and S.M.B. Wright. 2002. Performance of American native grass cultivars in the Canadian Prairie Provinces. Native Plants Journal: 3, 24-33.

Darroch B.A., Acharya, S.N., and J. Woosaree. 2001. Variety description of AEC Mountaineer broadglumed wheatgrass. Can. J. Plant Sci. 81:745-747.

Acharya, S.N., Darroch B.A., Hermesh, R. and Woosaree, J. 1992. Salt stress tolerance in Alberta populations of slender wheatgrass and alpine bluegrass. *Can. J. Plant Sci.* 72: 785-792.

## **Reports**

Woosaree, J. 2007. Native plant species for revegetating oil & gas disturbances in the sandy soils of the parkland ecoregion of Alberta. A final report: 1998-2006 prepared for Alberta Environment, Alberta Sustainable Resource Development, Alberta Research Council, Canadian Association of Petroleum Producers, Prairie Seeds Inc., Talisman Energy Inc. and Husky Energy. 32 pp.

Woosaree, J. 2007. Identifying Key Native Species and Efficient Strategies for Revegetating Sensitive Landscapes: Oil sand Areas, Saline Areas, Boreal Forest and Foothills Regions. A report prepared for the Canadian Association of Petroleum Producers, Husky Energy Inc. and Talisman Energy Inc. 18 pp.

Woosaree, J. 2007. Restoration of rough fescue prairie on a pipeline right-of-way in Bodo Hills. A final report prepared for Penn West Petroleum Ltd and Alberta Sustainable Resources Development. 31 pp.

Woosaree, J. and B. James. 2006. Identifying Key Native Species and Efficient Strategies for Revegetating Sensitive Landscapes: Oil sand Areas, Saline Areas, Boreal Forest and Foothills Regions. Prepared for the Canadian Petroleum Producers Association Husky Energy Inc., and Talisman Energy Inc. 18 pp.

Woosaree, J. and B. James. 2006. Restoration of rough fescue prairie on pipeline right-of-way in Bodo Hills. A Progress Report prepared for Penn West Petroleum and Alberta Sustainable Resources Development. 13 pp.

Woosaree, J. and B. James. 2006. Native plant species for revegetating oil & gas disturbances in the sandy soils of the parkland ecoregion of Alberta. Prepared for Alberta Environment, Alberta Sustainable Resource Development, Alberta Research Council, Canadian association of Petroleum Producers, Prairie Seeds Inc., Talisman Energy Inc. and Husky Energy. March 22, 2005. 43 pp.

Woosaree, J. and B. James. 2005. Development of native species and revegetating oil & gas disturbances in the sandy soils of the parkland ecoregion of Alberta. Prepared for Alberta Environment, Alberta Sustainable Resource Development, Alberta Research Council, Canadian Association of Petroleum Producers, Wainwright Army Training Centre, Prairie Seeds Inc., Talisman Energy Inc. and Husky Energy. March 22, 2005. 37 pp.

Woosaree, J. and B. James. 2004. Restoring fescue prairie grassland following wellsites disturbances on fescue prairie in east-central Alberta. 16<sup>th</sup> Int'l Conference, Society for Ecological Restoration, August 24-26, 2004, Victoria, Canada. Ecological Restoration.

Woosaree, J., 2004. An assessment of the vegetation naturally growing on the capped mine at Discovery Mine, Northwest Territories. Prepared for Aboriginal Engineering Ltd and Public Works, Government of Canada.

Woosaree, J. 2003. Development and seed production of native grasses and legumes for range improvement. Alberta Research Council. Prepared for the Alberta Agricultural Research Institute. Project No. 2000M664. 23 pp.

Woosaree, J. 2003. Directives in native plant development at the Alberta Research Council. Prepared for Alberta Sustainable Resource Development. 23 pp.

Woosaree, J. 2003. Evaluation of a new native seed mix for roadside reclamation. Interim report. Prepared for Alberta Transportation. 6 pp.

Woosaree, J. 2003. Evaluation of a reclamation seed mix in the sandy soil zone. Interim report. Prepared for Wainwright Army Base, Department of National Defense.

Woosaree, J. James, B. Pewarchuk, D. and Checkel, L. 2002. Development of Native Species Adapted to the Sandy Soils of the Parkland Ecoregion of Alberta - Progress Report for Alberta Environment, Talisman Energy Inc., Husky Energy, and Alberta Sustainable Resources. 18 pp.

Woosaree, J., Pewarchuk, D and L. Checkel. 2002. Seed collection of selected species inhabiting saline soils-2002. Prepared for Imperial Oil Resources. 4 pp.

Woosaree, J., 2000. Market assessment of the native plant industry in western Canada. Prepared for Alberta Environment and Alberta Agriculture, Food and Rural Development by Alberta Research Council, Vegreville, Alberta. Report #ESD/LM/00-2. ISBN: 0-7785-1384-X, Publication No: T/560. 106 pp.

Woosaree, J., B. James and D. Pewarchuk. 2000. Native plant development for reclamation and habitat restoration: Eastern slopes. Progress report (1999/00). Prepared for Heritage Canada, Alberta Agriculture, Food and Rural Development and Alberta Environment. Alberta Research Council, Vegreville, Alberta. 30 pp.

Pahl, M.D., Woosaree, J. 1998. Native plant development for reclamation and habitat restoration: Eastern slopes. Progress report (1997/98). Prepared for Heritage Canada and Alberta Environmental Protection. Alberta Research Council, Vegreville, Alberta. 29 pp.

Pahl, M.D., Woosaree, J., James, B., Pewarchuk, D. 1998. Native plant development for habitat restoration: Parkland region. Progress report (1997/98). Prepared for Ducks Unlimited Canada. Alberta Research Council, Vegreville, Alberta. 55 pp.

Pahl, M.D., Woosaree, J. 1997. Native plant development for reclamation and habitat restoration: Eastern slopes. Progress report (1996/97). Prepared for Heritage Canada and Alberta Environmental Protection. Alberta Research Council, Vegreville, Alberta. 31 pp.

Pahl, M.D., Woosaree, J., James, B., Pewarchuk, D. 1997. Native plant development for habitat restoration: Parkland region. Progress report (1996/97). Prepared for Ducks Unlimited Canada. Alberta Research Council. Vegreville, Alberta. 30 pp.

Hermesh, R., Woosaree, J., Darroch, B., Acharya, S.N., and Smreciu A. 1990. Initial selection for salt-tolerance in Rocky Mountain Accessions of slender wheatgrass and alpine bluegrass. Alberta Land Conservation and Reclamation Council. RRTAC 90-2.

### **Proceedings**

Woosaree, J. 2007. Plains rough fescue restoration in the Rumsey Natural Area. Presented to the Rumsey Stakeholder Group. September 17, 2007. Rumsey Trident Energy office. Rumsey. Alberta.

Woosaree, J. and M. McKenzie. 2007. Native Prairie Plants in Phytoremediation: Successes, Limitations and Knowledge Gaps. 2007 Canadian Land Reclamation CLRA/ACRSD 2007 Annual Meeting. Halifax, Nova Scotia. August 25 - 31, 2007.

Woosaree, J. 2007. Native Plant revegetation research at Alberta Research Council. Jasper National Park Leaseholder Working Group Meeting. Kinder Morgan Offices, Sherwood Park AB April 27, 2007

Woosaree, J. 2005. Revegetating oil & gas disturbance in the sandy soils of the Aspen Parkland Ecoregion. 2005 Canadian Land Reclamation (Alberta Chapter) Winter Conference and AGM: Radisson Hotel, Calgary, AB. February 17-18, 2005.

Woosaree, J. 2005. Reclamation of forested lands. 2005 Canadian Land Reclamation (Alberta Chapter) Winter Conference and AGM: Radisson Hotel, Calgary, AB. February 17-18, 2005.

Woosaree, J. 2005. Selecting plant materials for reclamation projects in northern ecosystems. Northern Latitudes Mining Reclamation Workshop: Meeting The Challenges Of Northern Climates. Dawson City, Yukon Territory. May 24-26, 2005

Woosaree, J. and B. James, 2004. Revegetation of wellsites disturbances on fescue prairie in East-Central Alberta. Presented to the International Society for Ecological Restoration conference. Victoria, British Columbia. August 23-26, 2004.

Woosaree, J., 2004. Native plant development: Helping Mother Nature heal. 2004 Back to the Roots Conference, September 22-24 th. Wingate Inn, Edmonton, September 22-24 th, 2004.

Woosaree, J., 2004. Controlling non-native species in native landscapes. 2004 Alberta Native Plant Council Conference. Coast Terrace Inn, Edmonton. May 8-9, 2004.

Woosaree, J., 2004. Plant species selection for revegetation of sandy soils. 2004 Soils Issues Forum & Poster Session, PTAC Environment Forum. Hyatt Regency, Calgary. March 23-24, 2004.

Woosaree, J., 2004. Native plant development at the Alberta Research Council Inc. Presented at the 2004 Canadian Forage and Turf Seed Conference. January 12-14, 2004. Radisson Hotel, Saskatoon.

Woosaree, J., 2003. Native plant development and reducing industry's footprint in sensitive environments. Presented at the 2003 PTAC Ecological Issues Forum and Workshop for the Upstream Oil and Gas Industry. October 14th and 15th, 2003 Sheraton Suites Eau Claire, Calgary, AB.

Woosaree, J., 2003. Developing a native seed industry for revegetation projects in the North West Territories. Presented to the Department of Resource, Wildlife & Economic Development, GNWT and the Decho Resource Management Board. Fort Providence, NWT. September 3, 2003.

Woosaree, J., 2003. Native plant research at the Alberta Research Council and reducing bison/automobile interaction. Presented to the Department of Transportation, GNWT. Hay River, NWT. September 4, 2003.

Woosaree, J., 2003. Native plant development for oil sands application. Poster Presentation - ARC Annual Review. Fort McMurray, AB. June 19, 2003.

Woosaree, J. and Porter P. 2003. A Balanced Approach to Conservation in the Ribstone Ecological Area. Paper Presentation. Native Plant Society of Saskatchewan 2003 Conference. Watrous, Saskatchewan.

Woosaree, J., Pewarchuk, D., James, B. and Checkel, L. 2002. New Initiatives of the Native Plant Development Project. Poster Presentation - ARC Annual Review. Alberta Research Council, Vegreville, AB.

Woosaree, J., Pewarchuk, D., James, B. and Checkel, L. 2002. Native Plant Development Program. Poster Presentation at the MLA Meeting, ARC Millwoods, Edmonton.

Woosaree, J. 2002. Native plant research at the Alberta Research Council Presented to the Alberta Naturalization Network society Annual Meeting. April 2002.

Woosaree, J. 2002. Native plant issues. Participated in workshop at the Western Canada's National Parks workshop on ecological integrity. Swift Current, SK. May 2002.

Woosaree, J. and D. Pewarchuk. 2001. Native plant development for reclamation. In: M. Nahir, K. Biggar, and G. Cotta (eds). Assessment and remediation of contaminates sites in Arctic and cold climates. May 7-8, 2001. Delta Edmonton south, Edmonton, Alberta. Pp139.

Woosaree, J. 2001. Performance of tested varieties for successful stand establishment. In: A. Phan and W. Poole (eds). Proceedings of Native Plant Summit 6 - Stand Enhancement. May 1-2, 2001, Brandon, Manitoba.

Woosaree, J. 2000. Is the grass greener on the other side - native species as a mean to reduce vehicle/wildlife interactions? In: Driving Safety Forum, "Ways and Means to Reduce Wildlife Strikes on an Industry Wide Basis". Petroleum Technology Alliance Canada. Calgary, Alberta.

Woosaree, J. 2000. Development of native plants for use in alpine reclamation. In: Proc. Global Land Reclamation/Remediation 2000 and Beyond. September 16-21, 2000. Mayfield Inn, Edmonton, Alberta, Canada.

Woosaree, J. and M. Pahl. 1999. Revegetation of oil wellsites disturbances in the fescue grassland of east central Alberta. In Proc. Perspectives in Land Reclamation and Restoration. September 28-30, 1999. Saskatoon, Saskatchewan, Canada. Pp.118-125.

Darroch, B.A, Woosaree, J., and James, B.T. 1995. Native grasses for reclaiming mine sites in Alberta. In: T. Hynes and M. Blanchette (eds). Procedure of Sudbury'95 - Mining and the Environment. May 28 - June 1, 1995. Sudbury, Ontario, Canada. Pp 1079-1087.

### **Articles in Popular Press**

Kilbourne, Derek. 2008. MD working with Alberta Research Council on reclamation. Starnews, Wainwright Weekly Newspaper. Wainwright.

Ross, Elsie. 2006. Scientist helping mother nature reduce industry footprint. New Technology. June 2006. Pp 20-22.

Jaremko, D. 2006. Precious grasses. Oil Week Magazine. March 2006. Pp 42 - 46.

Vegreville News Advertiser. 2003. ARC plants for Communities in Bloom. Vegreville News Advertiser. June 9, 2003.

Ongansoy Hans. November 2002. Going Native. Germination: the magazine of the Canadian Seed Industry. Vol 6 No 5. Pp 6-10.

Western Canadian Environment Industry Profiles. Spring 2002. Native plants: A growing concern at Alberta Research Council. The Western Environment Business. Vol: 3, Issue 2. P23-25.

BizEdmonton. May 2 to 15, 2002. Native grasses cultivated for reclamation projects. BizEdmonton. Pp12.

Friesen, Kenton. June 27-July 10, 2002. Sowing seeds of change with a natural lawn. Edge Real Estate. Calgary/Red Deer. Vol 2.