

DAVID RONALD SPARKS ROURKE

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I have often taken the road less travelled or blazed a road where none previously existed. Having grown up in the city and after completing a Masters in Agricultural Plant Science, my wife and I took \$4000 and rented 300 acres of farmland in 1980. The Rourke family now farm 6000 acres, about 20 minutes south of Brandon Manitoba. I have sat on numerous boards, including The Manitoba North Dakota Zero tillage Farmer's Association, Manitoba Wheat and Barley Growers Association, Cereals Canada, Keystone Agriculture Producers-Environment Committee and Canadian Agri Food Policy Institute. I founded and ran the Conservation Tillage Productivity Centre during the early 1990's to support the adoption to zero till farming. In 1983, my family and I started an agricultural contract research company, which has grown to five locations across Western Canada. Since 2017, I have been able to focus on farming and exploring the development of farming practices which are profitable, sequester large amounts of carbon, increase crop yields and lead to the elimination of the use of fossil fuels.

EDUCATION

PhD	University of Manitoba Clayton H. Riddell Faculty of Environment, Earth, and Resources Dissertation: "In Search of Net Positive Carbon Grain Farms in Western Canada Innovation in Policy and Practice" Supervisor: Dr. Davidson-Hunt	2021-Present
MSc	University of Manitoba, College of Agriculture Thesis: "Effect of straw residue management in Zero till crop production"	1981
BSc	University of Manitoba, College of Agriculture Major: Plant Science (Honors)	1978

HONORS AND AWARDS

Outstanding Young Agrologist Agriculture Institute of Canada	1995
Farmer of the Year Manitoba-North Dakota Zero Till Farmer's Association	1993
NSERC Student Fellowship	1979
University of Manitoba Graduate Student Fellowship	1978

PROFESSIONAL EXPERIENCE

Rourke Farms-General Manager	1980-Present
<ul style="list-style-type: none">• Farm research studies• Net-Positive Grain Farming 2022• Seed Treatments 2021• Multi-Crop Plot Study 2021• Field Research 2020• Intercrop Research 2017-2019	
Canamaize Seed Inc.-President	2020
<ul style="list-style-type: none">• Grazing-silage corn breeding	
Minto BioProducts Ltd.-General Manager	2006-2020
<ul style="list-style-type: none">• Farm ethanol-bioplastics plant	
Ag-Quest Inc. (MB/SK/AB)-Founder/Owner	1983-2016
<ul style="list-style-type: none">• Contract research	
Western Feed Grain Development Co-op-Founding Director	2006-2018
<ul style="list-style-type: none">• Development of new feed grains	
Oak Island Acres Goat Dairy Ltd.-General Manager	2010-2015
<ul style="list-style-type: none">• 600 head goat dairy	
Hog Hill Farms Ltd.-General Manager	1983-2016
<ul style="list-style-type: none">• Finishing pig farm	
Canada Grains Council-Project Coordinator	1985-1993
<ul style="list-style-type: none">• Coordination of research project in AB, MB, QC	
University of Manitoba-Research Associate	1980-1983
<ul style="list-style-type: none">• Winter wheat agronomy research trials	

FUNDING

Co-applicant: Developing a Net-Positive Network (NPN) for Education and Outreach to Build Healthier Soil Ecosystems in Western Canada. Awarded to Assiniboine Community College. Weston Family Soil Health Initiative 2022-2027. \$1,680,827

PUBLICATIONS

Books

Rourke, David. A Road to Fossil Fuel Free Farming: An Example and a Challenge. Available at www.fossilfuelfreefarming.com. 2021

Journal Publications

H. S. Xie, D. R. S. Rourke, and A. P. Hargrave. 1998. Effect of row spacing and seed/fertilizer placement on agronomic performance of wheat and canola in zero tillage systems. *Canadian Journal of Plant Science*. **78** (3): 389-394. <https://doi.org/10.4141/P97-063>

Stobbe, E.H. & Rourke, David & Iverson, A. (1986). Agronomic evaluation of zero-tillage drills. *Soil & Tillage Research – Soil Tillage Res* 8. 338-338. 10.1016/0167-1987(86)90376-4.

Conference Papers

Winter Wheat Planting Methodology David Rourke 1982 4th Manitoba North Dakota Zero Till Workshop Minot ND Jan 21-22, 1982 pages 10-19

Economics of Zero Till Winter Wheat Production in Manitoba David Rourke 4th Annual Manitoba North Dakota Zero Till Workshop Minto ND 1982 page 46-48

Conservation Tillage Productivity Center Report David Rourke 1992 14th Annual Zero Tillage Workshop Minot ND Jan 27-29 1992 pages 141-164

Conservation Tillage Productivity Center Report David Rourke 1994 16th Annual Zero Tillage Workshop Minot ND Jan 31- Feb 2 1994 pages 73-84

Wide Row Spacing: Is it Really Possible with No-Till - The Canadian Prairie Experience. Guy Lafond, Byron Irvine, George Clayton, Douglas Derksen, Eric Johnson, Adrian Johnston, Brian McConkey, Perry Miller and David Rourke. 1999 Northwest Direct Seed Cropping Systems Conference. January 5-7, 1999. Spokane Washington.

Farmer production Guides

Zero Tillage Production Manual; Resby Coutts and Keith Smith author-advisory committee David Rourke (Chair), Garth Butcher, Robert Stevenson and Bob Bradley 1992

Risk Management Guide for Wheat Production-Canada Grains Council 1988

Intensive Wheat Management-Canada Grains Council 1986

PATENTS

Rourke, David Ronald Spark, Patent US5943850A (1998)/ WO1999034661A1 (1999)- apparatus and method for use in harvesting crops of the Brassica comprising: a crop pusher assembly. The patent was licensed to Ag Shield from Benito Manitoba

PRESENTATIONS AND INVITED LECTURES

Agro Soyuz-Ukraine-Canadian Farm Practice-Zero Till 2005

Horsch Farm Machinery-Germany, Italy, Hungary-Zero Till Crop production and seeding geometry 1996

BASF-Germany-Intensive Cereal Management in the Prairies 1986

PROFESSIONAL TRAINING

Climate Reality Leadership

Atlanta, 2019

Leadership at its Best

Syngenta, Minneapolis, 2014

ISQA & SQA Meetings

Phoenix, 1995

In Sight; Introduction to GLP

1994

Pacific Rim Consulting; GLP Review, Protocol, RDFN, ERP, OECD, GLP

1993

DowElanco; QA-Audit Procedures

1992

Ciba-Geigy Corporation; GLP/QA for Field Trials

1992

Agvise; Good Laboratory Practises (GLP)-Field

1991

PROFESSIONAL AFFILIATIONS

Canadian Seed Growers Association, 1985-present; Select Grower, 1989-present

Manitoba Institute of Agrology, 1983 to present

Weed Science Society of America, 1984 to present

Director: Canadian Agri food Policy Institute 2015-2020

Director: Western Feed Grain Development Co-op Ltd. 2006-2018

National Alliance of Independent Crop Consultants 1999 to 2012

Chairman of the Minto Economic Development Steering Committee 2008

Manitoba-North Dakota Zero Till Farmer's Association

- Board of Director 1990-1992
- Chairman of Program Committee 1991
- Chairman of Zero Till Production Manual 1991-1992
- Founder and Lead of the Conservation Tillage Productivity Centre 1990 -1994

Representative of Board to the House of Commons Standing Committee on Agriculture - Sustainable Agriculture 1992

Crop Management Sub-Committee - M.A.S.C.C. 1982 to 1990

PROFESSIONAL SERVICE

Contract Pesticide Reviewer

Agriculture Canada, 1990-1991, 1995-1996, 2000

Contract Summarizer-Herbicide Efficacy

Rhone-Poulenc, 1992

Coordinator of Field Operations

Worker Exposure study in Western Canada, 1990

Summarizer

Plant growth Regulator section of Expert Committee on Weeds: Western Canada, 1987-1989