

# Dennis G. Johnson

## Professor

**Appointment** 70% Research, 30% Service

**Research Area** Dairy Cattle Production Systems

**Appointment History**

1985-present	Professor
1978-1985	Associate Professor
1974-1978	Assistant Professor
1968-1974	Instructor

### Graduate Program Affiliations

Animal Sciences – Member

### Professional and Honorary Societies

Member, American Dairy Science Association  
Member, American Society of Animal Science  
Member, Sustainable Farming Association  
Member, Land Stewardship Project

### Five Most Significant Publications

**Team coordinated by Minnesota Department of Agriculture. 2004. *Dairy Your Way.***

A publication that will explain the pro's and con's of several ways of organizing dairy farms. There has been a desperate need for a clear exposition of alternatives to industrial scale farms. Will be released this year

**Cuomo, G.J., D.G. Johnson, F. Forcella, M.V. Rudstrom, G.D. Lemme, and N.P. Martin. 1999. Pasture renovation and grazing intensity impacts on cool-season grass pastures. *Journal of Production Agriculture* 12:564-569).**

Showed how pastures can be developed for management intensive grazing yielding additional high quality forage at 10% of the cost of hay

**Murphy, K.D., D.G. Johnson, R.D. Appleman, and D.E. Otterby. 1991. Effects of rearing diet, age at freshening and lactation feeding system on performance. *Journal of Dairy Science* 74:2708.**

Rapid growth of heifers does not necessarily develop more effective cows

**Johnson, D.G. and D.E. Otterby. 1981. Influence of dry period diet on early postpartum health, feed intake, milk production and reproductive efficiency of Holstein cows. *Journal of Dairy Science* 64:290.**

This research was conducted as displaced abomasum was becoming a major health problem for dairy cows. Demonstrated that diet, per se, was not the only cause of displaced abomasums.

**Otterby, D.E., D.G. Johnson, and H.W. Polzin. 1976. Fermented colostrum or milk replacer for growing calves. *Journal of Dairy Science* 59:2001.**

First controlled studies utilizing preserved colostrum as a milk replacement.

## Refereed Journal Publications and Book Chapters (Last Five Years)

Authored or co-authored the following paper in a peer-reviewed journal.

Nennich, T.D., J.G. Linn, **D.G. Johnson**, M.I. Endres, and H.G. Jung. 2003. Comparison of Feeding Corn Silages from Leafy or Conventional Corn Hybrids to Lactating Dairy Cows. *J. Dairy Sci.* 86: 2932-2939.

## Proceedings and Invited lectures

**Johnson, D.** and H. Chester-Jones. 2002. Grazing management for dairy cattle. *In: Proc. Minnesota Dairy Days*, January 8-18, 8 locations in MN. pp. 71-73.

## Funding (Last Five Years) – \$373,000

**SARE.** Systems evaluation of the components of reduced input dairy farms. 2003-05. \$10,000.

**MDA.** Enhancement of On-farm Alfalfa Grazing for Beef and Dairy Heifer Production. 2001. \$13,000.

**Legislative Commission on MN Resources,** Sustainable Livestock Systems. 1999. \$350,000.

## Outreach Activities (Last Five Years)

### Program Team Involvement and Goals

#### The major programs include:

##### **Dairy Modernization Program, Team Member**

Audience: MN dairy stakeholders, producers and consumers

Goal: Plan and implement educational curriculum for improved (modernized) dairy management techniques and operations.

##### **Dairy Advisory Group, Member**

Group members: Core Dairy Extension Team, COAFES and CVM dairy faculty, MN Dairy Initiative Program, MN Dairy Leaders Roundtable, MDA, MN MPA, Ridgewater Community College, and other dairy industry professionals

Audience: MN dairy stakeholders, producers and consumers

Goal: Provide input on the development of educational activities relevant to dairy producers and the dairy industry.

##### **Minnesota Dairy Days, Member, Program planning group.**

Audience: Producers, dairy farm advisors, industry professionals, students

Goal: Provide current information on important topics, present practical ideas on how producers can make stepwise changes in their operations to achieve success.

##### **Beginning Graziers Short Course, Contributor**

Audience: Dairy producers, beginner graziers

Goal: Provide information to moderate sized dairy farms on the role of grazing in sustainable systems and evaluation of forages for lactating dairy cows.

##### **Grazing Basics Workshops, Contributor**

Audience: Dairy producers, industry professionals

Goal: Provide basic education with topics on the basics of goal setting, economics, agronomy, soils, animal care, pasture management and discussion groups.

##### **Pasture Walks, Coordinator**

Audience: Dairy producers, industry professionals

Goal: Provide practical information on grazing.

**Product Development (selected materials developed)**

- Minnesota Dairy Days CD – proceedings articles, updates on U of MN dairy research, additional topic-related material, and links to dairy related sites.
- Minnesota Dairy Days Proceedings
- Graziers Short Course curriculum and class materials
- Web-based Grazing Workshop (in development)
- Field Days
- Presentations on Grazing and Sustainable Agriculture

**Program Delivery Events**

Programs are delivered in a variety of formats including annual programs, workshops, lectures, seminars, and conferences. Some examples include:

- Minnesota Dairy Days
- Graziers Workshops
- Pasture Walks

**Extension Scholarship**

**Johnson, D.** 2002. Forages for Livestock: Economic – Environmental – Human Benefits. Keynote presentation at American Forage and Grassland Council, Bloomington, MN. July 15, 2002.

Undersander, D., B. Albert, D. Cosgrove, **D. Johnson**, and P. Peterson. 2002 (revision). Pastures for profit: A guide to rotational grazing. Publ. No. A3529 (Wisconsin); R-12-02-3M-495 (Minnesota).

**Service**

Co-Chair, Minnesota Institute for Sustainable Agriculture Joint Seminar, 2002.