

## Assisting Farmers with Arthritis

Arthritis and related musculoskeletal conditions are the leading cause of disability in the United States today. In fact, arthritis is a major cause of work disability and is also the most common reason given by adults between the ages 40 and 75 for limitations in their physical activities and restrictions in their activities of daily life. In reality, arthritis is a potentially disabling condition for anyone with these diseases, but the impact of arthritis on people living in rural communities is often even more severe. The rural, agricultural environment presents major physical challenges for persons with arthritis, both at home and on-the-job.

The **MARRTC/AgrAbility: Dissemination And Technology Transfer To Rural Communities Project (more commonly known as the "Farmers with Arthritis Program")** actively works to meet the need of persons with arthritis-related disabilities in rural agricultural communities. Missouri farmers are eligible if they have been clinically diagnosed with some form of arthritis. Farmers will be provided with an on-the-farm assessment, worksite evaluation, and suggestions for practical, safety, and effective interventions. The program serves as a resource for farmers with chronic arthritis conditions. The program also suggests home and equipment modifications or adaptations; recommends proper techniques and body mechanics; and tool usage to prevent pain and further injury with this disease.



## Success Story

William Wetherell assists part time on the family livestock and grain operation. He contacted the MARRTC Farmers with Arthritis Project because he was having problems with pain and fatigue due to his osteoarthritis. The MARRTC staff suggested options for mounting the tractor; installed a metal grate on steps and platform of the tractor to provide better traction; fabricated a longer handle for the PTO lever to reach the right-side of the tractor seat; and taught him proper body mechanics for shoveling. As a result of assistance from the MARRTC, William has been able to significantly reduce the discomfort levels he previously experienced using his Farmall M and IHC 806 tractors. "I was surprised that simple modifications combined with small changes in daily routines and habits could result in so much improvement in comfort for me while I am operating these tractors."

The first step was to provide the farm operator with an on-the-farm assessment to evaluate the problems and provide practical, safe, and effective solutions.

## Problems



Pain in knees, back, shoulders, and neck due to repetitive twisting and reaching motion necessary for PTO shut-off on the tractor while seated.



**Problems continued**

Pain in knees and back as well as fatigue from poor positioning in the operators seat.



Pain and knee and back fatigue resulting from poor positioning in the operators seat.

## Problems continued

Pain when mounting his old tractor due to position of the operator seat and steps.



## Solutions

### The MARRTC/AgrAbility staff offered:

- Education and assistance to help identify ways to successfully and safely accommodate William's arthritis on the farm.
- Analysis of his on-the-farm work tasks.
- Specific ideas for safe, affordable, and practical modifications or solutions.
- Instruction on proper body mechanics.
- Guidance on tool alternative techniques.
- Referral to the local Central Missouri Regional Arthritis Center.
- Guidance on home and out buildings alternative techniques.



Tanya Kessinger, OTS, Karen Funkenbusch, MA, Marian Minor, Ph.D., PT, and Willard Downs, Ph.D., 2001

## Services

### **Assistance included:**

- Assessing the work site.
- Suggesting safe and practical equipment modifications.
- Analyzing work tasks.
- Providing guidance on how to restructure work tasks.
- Identifying ways to prevent secondary injury.
- On-going follow up.

### **Indirect services included:**

- Providing arthritis related information and resource materials.
- Continuing on-going relationship with farmer and his family.
- Promoting arthritis awareness to the general public.



## A Few Facts About Arthritis and Agriculture

### **Arthritis is the leading cause of disability among U.S. adults.**

- Arthritis and chronic joint symptoms affect nearly 70 million Americans, or about one of every three adults.
- In 1997, the costs for arthritis totaled \$86.2 billion -- a staggering 1 percent of the U.S. gross domestic product.

### **Arthritis or Chronic Joint Symptoms (CJS) is not just for old person's disease.**

- One of three U.S. adults are affected by arthritis or chronic joint symptoms.
- Nineteen percent of people with this disease are under the age of 44.
- Forth two percent of people with this disease are under the age of 65.
- Fifty eight percent of people with this disease are 65 years of age or older.

### **Arthritis affects more than joints.**

- When a person experiences the pain of chronic arthritis, it is hard to stay active.
- Other physical problems can develop, including heart disease, high blood pressure, and too much weight gain.
- Arthritis can also affect the mental health of the person with the disease and his / her family.
- Dealing with physical pain can create feelings of stress and helplessness.
- Dealing with the cost of health care often creates a financial burden in families dealing with arthritis.

### **ALL forms of arthritis can be helped.**

- There is no magic cure for arthritis. *However*, experience shows that staying active and knowing how to manage your arthritis can greatly reduce the effects of this disease.
- Some forms of arthritis can be prevented.



## What Can A Farmer Do?

### **Understand the warning signs**

- Swollen, painful or hot joints.
- Unexplained weight gain or fatigue.

### **Seek professional help early**

- Rheumatologists are doctors who specialize in arthritis.

### **Seek the experience of others**

- You may not have to look far to find people who have solved many arthritis problems.

### **Use good body mechanics**

- Use body leverage
- Distribute the load over stronger, larger joints
- Don't stay in the same position for long periods
- Reduce excess body weight
- Use good posture.

### **Select helpful products**

- Use wheels and levers
- Use lightweight objects
- Use enlarged handles
- Use convenience items.

### **Stay active**

- Keep your joints flexible with exercise
- Do at least 30-minutes of moderate physical activity most days of the week.



## For More Arthritis Information

### **Missouri Arthritis Rehabilitation Research and Training Center**

University of Missouri Health Sciences Center

Toll Free: 877.882.6826

TTY: 800.735.2966 (Relay Missouri)

E-mail: [marrtc@missouri.edu](mailto:marrtc@missouri.edu)

<http://marrtc.missouri.edu/about/grant.html>

### **Missouri AgrAbility Project**

University of Missouri-Columbia

Agricultural Engineering Extension

217 Agricultural Engineering Building

Columbia, Missouri 65211

1.800.995.8503

<http://www.fse.missouri.edu/>

### **National Center for Chronic Disease (CDC) Prevention and Health Promotion**

1600 Clifton Rd.

Atlanta, GA 30333, U.S.A

Public Inquiries: 404.639.3534 / 800311.3435

<http://www.cdc.gov/nccdphp/arthritis/>

### **The National Institute of Arthritis and Musculoskeletal and Skin Diseases Information Clearinghouse**

National Institutes of Health

1 AMS Circle

Bethesda, MD 20892-3675

Telephone: 301.495.4484

Fax: 301.718.6366

TTY: 301.565.2966

<http://www.circlesolutions.com/niams/>





## For More Arthritis Information

### **Arthritis Foundation**

<http://www.arthritis.org/>

### **Missouri Arthritis & Osteoporosis Program**

Missouri Department of Health and Senior Services  
Unit of Chronic Disease Control  
920 Wildwood Drive  
P. O. Box 570  
Jefferson City, Missouri 65102-0570  
800.316.0935 or 800.735.2966 (TTY)  
<http://www.dhss.state.mo.us/maop/>

### **Missouri Regional Arthritis Centers**

#### **Central Missouri Regional Arthritis Center**

601 Business Loop 70W, Suite 219  
Columbia, MO 65203  
Phone: 573.882.8097  
Fax: 573.884.5509  
<http://marrtc.missouri.edu/about/grant.html>

#### **Kansas City Regional Arthritis Center**

Saint Luke's Hospital Regional Arthritis Center  
4401 Wornall Road  
Kansas City, Missouri 64111-3238  
Phone: 816.32.734  
Fax: 816.32.211  
<http://marrtc.missouri.edu/about/grant.html>



## For More Arthritis Information

### **Northeast Regional Arthritis Center**

Kirksville College of Osteopathic Medicine  
800 W. Jefferson  
Kirksville, MO 63501  
Phone: 660.26.049 or 800.26.266  
Fax: 660.26.928  
<http://marrtc.missouri.edu/about/grant.html>

### **Northwest Regional Arthritis Center**

801 Faraon St.  
St. Joseph, MO 64501  
Phone: 816.271.7064 or 800.443.8858  
Fax: 816.271.7409  
<http://marrtc.missouri.edu/about/grant.html>

### **Southeast Missouri Regional Arthritis Center**

211 St. Francis Dr.  
Cape Girardeau, MO 63703  
Phone: 573.331.5880 or 888.216.3293  
<http://marrtc.missouri.edu/about/grant.html>  
Fax: 573.331.5028

### **Southwest Regional Arthritis Center**

St. John's Hospital  
1235 E. Cherokee  
Springfield, MO 65804  
Phone: 417.820.3665, 417.820.3446 or 800.835.5197  
Fax: 417.888.7785  
<http://marrtc.missouri.edu/about/grant.html>



## For More Arthritis Information

### **St. Louis Regional Arthritis Center**

8390 Delmar Blvd.

St. Louis, MO 63124-2100

Phone: 314.991.9333 ext. 316

Fax: 314.991.4020

<http://marrtc.missouri.edu/about/grant.html>

