

# ► *Gaining ground*

*Farmers no longer forced into retirement by disability*

**Mike Williams** is the strong, silent type—a perfect fit for the stereotype of men who make a living from the land. The 61-year-old Williams has lived and worked on his family's Greene County farm his entire life, spending long hours in the field as he planted crops, baled hay, raised livestock and repaired machinery.

**L**ike many farmers, Williams thought the aches and pains just came with the territory. But the pain that accompanied agricultural work finally reached a point that he could no longer ignore it—or stay silent about it. He suffers from three types of arthritis—psoriatic, rheumatoid and osteoarthritis—all of which can cause chronic pain or long-term damage to the joints. His stiff, disfigured hands are unable to do many of the tasks he once performed easily on a daily basis. Pain and swelling also affect other joints and sap his endurance, which means he spends more time in bed than on a tractor.

"I was always big and strong and could carry four buckets of water at a time," Williams says. "If something was in my way, I moved it. But the years of hard work have taken a toll on my joints. Driving a tractor all day long doesn't sound all that hard, but, at the end of the day when I get off it, I'm pretty tired."

*Mike Williams (with wife Diann) suffers from three types of arthritis and other health conditions, but he's still able to stay active on the farm.*



## A growing problem

Although Williams lives in a sparsely populated area of southwestern Indiana, as an arthritis sufferer, he has plenty of company. "About one-third of all farmers in this country have some form of arthritis that hinders them from doing daily chores because of either stiffness or pain in the joints," says William Field, Purdue Extension safety specialist and project leader for the Breaking New Ground (BNG) Resource Center. BNG's outreach program serves agricultural workers who suffer from disabilities, such as arthritis, visual impairment, back injury or amputation, that make it difficult for them to continue farming or ranching.

"We see how difficult it is for farmers like Mike to keep working and to stay active longer in their lifetime," Field says. "We believe it's important to educate agricultural workers about arthritis and come up with some adaptive aids or solutions that reduce the stress on their joints and make it easier for them to work."

In 2007, BNG teamed up with the Arthritis Foundation, Indiana Chapter to produce *Gaining Ground on Arthritis: Managing Arthritis in the Agricultural Workplace*, an educational DVD to help people understand arthritis and to provide practical tips



Purdue Breaking New Ground

*Steps up the side of this grain bin make it easier for Brookston, Ind., farmer Keith Morgan to access the bin. Morgan, who was assisted by Purdue's Breaking New Ground outreach program, has also added steps on his tractors and a platform lift on his combine.*

on protecting joints, managing stress and modifying work practices. The DVD's May release coincided with National Arthritis Awareness Month.

## Attracting attention

Williams, who was featured in print and broadcast media around the state when the DVD was promoted,

is increasing awareness by talking publicly about his private battle with arthritis. He wants others to learn about the disease and the resources that are available. "It's worth it, if I can prevent someone else from going through what I do," Williams says from the kitchen table—the hub of the farm. Williams hopes that his son Kyle will heed this advice and adopt practices that reduce repetitive movements while he is still young enough for it to make a difference.

Although Williams has turned control of the farm over to Kyle, he is still able to work using assistive technology devices, which were made possible by BNG and Indiana Vocational Rehabilitation. "We have mostly older equipment, so steps on the tractors make it a lot easier to get on," he says. "The Mule (a utility

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**William Field**

*Project Manager, Breaking New Ground Resource Center*





*Mike Williams relies on assistive technology devices, such as this utility vehicle, and help from family and friends.*

vehicle) has been a tremendous help. It enables me to go to the barn and pick up parts to bring to the shop to work on and to take feed and water to the calves." Williams also uses assistive devices in his workshop to help him keep farm machinery and seven semitrailers in working order. A device that accumulates and lifts hay bales makes it possible for him to participate in hay baling, which has always been one of his favorite farm chores.

### **Finding solutions**

Many agricultural workers do not know they may be at risk of developing arthritis or that

organizations like BNG, Vocational Rehabilitation and the Arthritis Foundation are available to help them. "We didn't realize anything like this existed," says Williams' wife Diann about the assistance they received to keep Mike active in not only his profession but his way of life. "We just kind of fell into it. We went to the Vocational Rehabilitation office in Terre Haute to get Mike's hearing aid fixed, and they told us about the (BNG) program. It's been wonderful."

A Vocational Rehabilitation caseworker referred the Williams to Steve Swain, BNG rural rehabilitation

specialist. Swain travels throughout the state to meet with farmers and their families; discusses their farm operation and equipment; and then recommends adaptive aids to help farmers overcome their barriers.

"It usually starts around the kitchen table and ends with a tour of the farm," says Swain, who may spend several hours with a family during a site visit. Each case is different, and his recommendations may range from one to two items to several pages long. A combination of federal and state resources provides funding for the assistive devices.





## Making information and assistance accessible to farmers with disabilities

In 1979, a farmer with a disability from Royal Center, Ind., contacted Purdue University's Department of Agricultural and Biological Engineering (ABE) to ask for help in modifying his tractor so that he could continue farming. He had sustained a spinal cord injury in a truck crash that resulted in paraplegia.

For William Field, it was his first experience with rehabilitation engineering. Field, now Breaking New Ground (BNG) project leader, worked with some ABE students to figure out how to get the farmer back on his tractor.

This initial project developed into the BNG Resource Center, a primary source of information on rehabilitation technology for more than half-a-million agricultural workers who have a disability. BNG offers many resources, including the following.

### The Toolbox

*The Toolbox* CD catalogs more than 770 assistive technology products that can make agriculture more accessible for individuals with physical limitations. Products are presented in a fact sheet format with added features that include videoclips, photographs and hyperlinks to contact information for product suppliers.

"Many agricultural workers with disabilities—and the professionals who serve them—are simply unaware of the help that is available," says Paul Jones, BNG program manager. "By making information available to more communities, we can significantly improve the lives of farmers and ranchers with disabilities."

*The Toolbox* CD can be viewed at every Extension office in the United States, thanks to a grant from NEC Foundation of America. A printed catalog is also available. Visit [www.bngtoolbox.info](http://www.bngtoolbox.info) for more information or to order *The Toolbox*.



### Gaining Ground on Arthritis

The *Gaining Ground on Arthritis* DVD, a collaborative program between BNG and the Arthritis Foundation, Indiana Chapter, provides information on how to help agricultural workers manage arthritis, protect their joints and modify tools.

The DVD premiered at a May 2007 fund-raising event in Rossville, Ind., where it was mainly filmed. All proceeds benefited the Arthritis Foundation, Indiana Chapter and helped distribute the DVD to farmers throughout state. The DVD can be viewed at all 92 Purdue Extension county offices. Find more information about or purchase the DVD by going to the "Arthritis and Agriculture" link on the BNG Web site [www.breakingnewground.info](http://www.breakingnewground.info).

### Caregiving in the Heartland

When an agricultural worker has a disability, it affects the entire family, particularly caregivers. Rural caregivers face added difficulties due to geographical isolation; limited access to community services and resources; and the absence of accessible transportation systems.

In summer 2007, BNG sponsored Caregiving in the Heartland, a summer workshop series to assist caregivers and the professionals who work with them. BNG partnered with critical-access hospitals and Area Agencies on Aging to offer the workshops.

Check out additional resources online at [www.breakingnewground.info](http://www.breakingnewground.info).

"Farmers are independent," says Swain, who makes about 65 new site visits a year and has between 50-60 ongoing clients at one time. "They're problem-solvers. We're trying to get information to them so they don't have to re-invent the wheel." Williams credits BNG's outreach program with making it possible for him to continue farming. "These devices make my job easier to where I can still get out there and work," he says.

### What the future holds

With the average age of the American farmer climbing above 55, increasingly more farmers will find tasks difficult to complete. "Most people look at farming as being a healthy occupation where people are outside and doing a lot of work, but, in reality, it's an occupation that has a lot of repetitive kinds of activities that can cause the onset of arthritis," Field says. "We know a lot more about arthritis than we ever did, and there are a lot of resources for anyone who needs help. These resources are based on good science. We can't cure arthritis, but we can do things to allow farmers to work freer and be more comfortable for longer periods of time."

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Reprinted from *Purdue Agriculture Magazine*, Vol. 11, No. 1.

4/08

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