Taking care of your pasture makes economic and environmental sense. Good pasture management is the key to higher profits and healthier natural resources. Russell Hughes, farmer in Poweshiek County, Iowa, agrees, and has the track record to prove that it works. Hughes started rotational grazing eight years ago, and has been doing it ever since.

Good for the pocketbook
Hughes has found that if he takes good care of the grass, the cattle take care of themselves. "If it's good for the grass, it's good for the animals. And bottom line, what's good for the animals means more pounds per acre. The first year I established a rotational grazing system, I had as much production as approximately 150 bushel corn or 45-50 bushel beans," said Hughes. "That first year alone allowed me to pay for the whole system, including electric fence, labor and materials. I haven't seen another investment that more than paid for itself in the first year—and that's what convinced me to continue rotational grazing."

Good for the environment
In addition to economic benefits, healthy pastures help reduce erosion, improve water quality, and provide food and habitat for wildlife. The biggest environmental benefit Hughes has noticed since he began rotational grazing is the reduction in erosion. "The more grass, and the healthier the grass, the less soil erosion you have. Plus you're producing beef at the same time. The two just go hand in hand," says Hughes.

With reduced erosion comes improved water quality, which is important to the Hughes for many reasons. Their pond and creeks serve as water sources for their cattle, but also as recreation areas where family and friends enjoy fishing, ice fishing and swimming. "Our farm pond is sort of a barometer for erosion. Lots of times after heavy rains, the water is still clear," says Hughes. "This shows me that the pasture really helps keep the soil in place."

Then there's the wildlife angle," continues Hughes. "We've seen an increase in wildlife since we began rotational grazing on our farm. We even have pheasants hatch out in pastures before we get around to grazing them again," says Hughes.

Hughes has also found that he uses fewer chemicals and fertilizer. "Thick, good grass helps crowd out thistles, which reduces my pesticide use. We still get thistles, but they are much more manageable," says Hughes.

Hughes' soil is in mint condition too. "I haven't fertilized a piece of land since 1986, but the soil test still says that I have enough P (phosphorus) and K (potassium) to grow corn." Test results also reveal plenty of nitrogen, due in part to the legumes used in his seeding mixture.

Hughes generally uses a mixture of orchardgrass, brome, trefoil, mixture of clovers and some alfalfa. In more even fields, like lower river bottoms, he gets good results with reed canarygrass.

Good for the economy
Pastures and rangeland make up 45 percent of the private lands in the United States and provide forage that help produce beef, milk, wool and leather. The impact of healthy pasture land and the livestock that graze those pastures is significant to the nation's economy and to the livelihood of those who manage the land.

How it worked
"The first year I began rotational grazing, other guys were feeding winter supply, the only difference for me was what I did—set up the electric fence and rotated the cattle. I ran 60 cows on 63 acres; 19 paddocks of about 3 acres each," recalls Hughes. His rotation was about 2 days per paddock, which gave each paddock approximately 38 days to grow back.
Keeping animals from directly entering your water source will help you maintain higher water quality which will minimize bacteria and disease.

Weed free pastures are a result of good management.

An electric fence system is an economical way to plan and control livestock movement.

This system allowed Hughes to graze about half of the land and to make hay on half. "I was able to increase my stocking rate and production, avoid overgrazing the land, keep my winter hay supply, and make a profit on hay." Now Hughes' rotation is intensive—60 cows, 2 acres, 3 days. But he adds that every year is different, depending on the number of cattle, growing conditions, and forage availability. Hughes uses ponds and creeks for water, and fences livestock out. "The thing to remember," says Hughes, "is that you have control. You control access to the water, and determine where and for how long the cattle graze, which has both conservation and economic implications."

Hughes says a well thought out grazing system can pay off. "Initially there's labor to set up the system, but after that it really doesn't take too long to move the cattle. They catch on rather quickly, and pretty soon they are ready and waiting at the gate, anxious to go to the next paddock. They usually come as soon as I call. One advantage of the system," adds Hughes, "is the flexibility. Of course it takes some observation, but you are able to adjust your rotation to the animals' needs, season, and available forage."

**NRCS Can Help**

Hughes and his family have worked with USDA's Natural Resources Conservation Service (NRCS) for more than twenty-five years on projects ranging from design and cost share of their pond, to laying out terraces, to planning a windbreak, a project they are currently undertaking. In addition to grazing, Hughes and his wife Sheri, and their three daughters Lauren, Erin, and Katelyn, farm 650–700 acres. They raise corn, beans and oats and have 88 acres in the Conservation Reserve Program. We've always been conservation minded," says Hughes. "My dad started contouring years before it got popular; in fact SCS (Soil Conservation Service, NRCS's previous name) laid out the contour lines back in the 50's. We've seeded pastures, improved pastures, done crop rotations, and now use minimum till and no-till. I've been farming since 1974, and NRCS has always been real helpful anytime I've worked with them," says Hughes. "More farmers need to be aware of, and take advantage of all the different things NRCS can do, including cost-sharing, and planning assistance. I just recently discovered that NRCS has become more involved in pasture management, which is good to know. My experience with NRCS has always been positive."

**NRCS & pasture management**

NRCS and local Soil and Water Conservation Districts provide pasture management planning assistance to producers on private lands. "NRCS's goal is to improve the grassland resources while benefiting those who manage the land," says Leroy Brown, NRCS State Conservationist in Iowa. "The NRCS can provide producers with information to care for the soil, water and other resources, and to get the most out of their pastures and grasslands," said Brown.

"Pasture management is more than just moving livestock from one pasture to another. It involves choosing and managing forages, water development and distribution, fencing, soil fertility, weed and brush control," said Brown. "NRCS can work with producers to integrate these items into systems that meet their natural resource and livestock production goals."

**Developing your grazing system**

Russell Hughes has found that you can turn a profit and take care of the resources. Many producers across the nation are finding similar results. If you're interested in developing a pasture management plan, contact your local NRCS office for more information and assistance.

The author is a Public Affairs Specialist, USDA Natural Resources Conservation Service, Des Moines, Iowa.