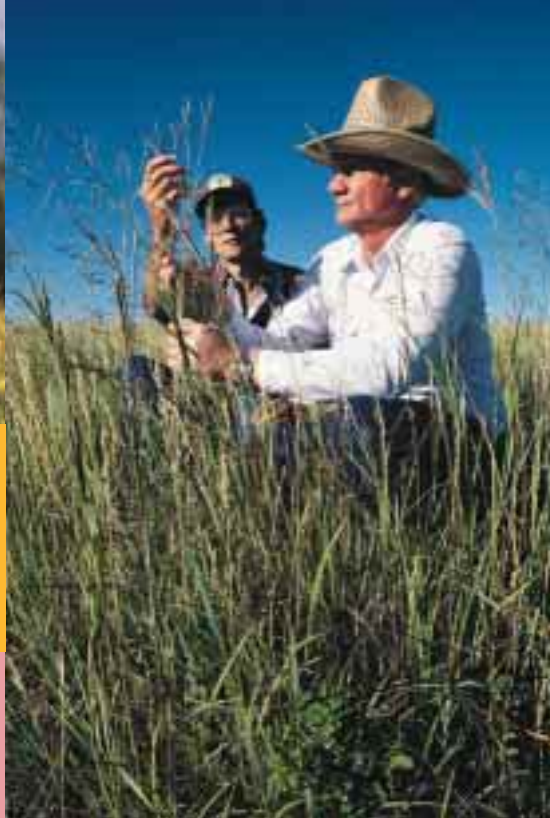


## Working with Land and People



*National action may be led and aided by government,  
but the soil must be conserved ultimately by those  
who till the land and live by its products.*

— Hugh Hammond Bennett  
Chief, Soil Conservation Service, 1939



In ways unprecedented in human history, the United States has directed a part of its experiment in government “of the people, by the people, and for the people” to land stewardship. Since the mid-1930s, policy for the conservation of private land has involved a direct partnership among the Federal Government, states, and local communities. For six decades, conservation districts have been a testing ground for local leadership in land stewardship. Districts have provided local leadership and direction, while the partnership with a Federal agency has provided essential measures of technical excellence and consistency. This unique arrangement has proved resilient and effective. Now, we enter the 21st century, with its new pressures on land and people. Fortunately, we have considerable experience about what works and what does not.



*The challenge for policymakers today is to capture a national vision that resolves into regional goals and, with further refinement, translates into local action.*

We know, for example, that national leadership is essential. Without a common vision and without the information and understanding to help us work together toward our mutual objectives, the land conservation movement is like an orchestra without a conductor—many skillful musicians but not necessarily beautiful music. We also know that solutions to problems that face us in our search for a sustainable society come from the ground up. As Aldo Leopold reminded us, it is “the farmer who must weave the greater part of the American rug on which we stand.”

The challenge for policymakers today is to capture a national vision that resolves into regional goals and, with further

refinement, translates into local action. When viewed from the ground up, the challenge is to devise and carry out local actions adapted to specific economic, environmental, and social conditions that, when woven together, create healthy farms and ranches and combine to create healthy ecosystems, watersheds, and communities. Such healthy components are the building blocks of a sustainable society.

As the agency charged with conservation leadership in the U.S. Department of Agriculture, NRCS must focus simultaneously on both aspects of the conservation challenge: The overall vision and effective local action. Neither can succeed without the other.

To succeed, the national conservation vision for the 21st century must be consistent with the social and cultural views of the American people, individually and collectively. Those views change over time. People learn from experience, discover new scientific insights, and gain new skills and capabilities.

Clearly, the relationship between land and people has changed over the course of our history, and each new change seems to follow more rapidly on the heels of the one before. We can expect future change equal or more rapid in pace. We do not have all the answers today, but we can use the knowledge and skills that we have and recognize and use improvements as they come along.

Today's vision of conservation incorporates more than a desire for efficient production, a fear of pollution, or a disgust over degraded natural landscapes. It incorporates a growing

### *We are coming to recognize land as a partner.*

understanding of the personal relationships among individuals, communities, and the natural environment. It embraces the notion that land is not simply an input to production or a pleasing vista. Instead, we are coming to recognize land as a partner: A partner we work with, just like we work with our neighbors, to achieve our individual and community goals. This view requires an acceptance of personal responsibility for the health of the land or, in Leopold's view, a land ethic:

"All ethics so far evolved rest upon a single premise: that the individual is a member of a community of interdependent parts. His instincts prompt him to compete for his place in

that community, but his ethics prompt him also to cooperate....The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land."

Thus, we have a guiding principle for a new vision in a modern era: Doing business in a new way, with landowners who are managing land under concepts that recognize the importance of sustainability, using new and rapidly changing tools and technologies. In such a fast-changing environment, conservation will require an enduring commitment by individuals, communities, corporations, and the Nation.

Developing this commitment will start with an understanding of the dynamics of land; the connections among environmental quality, economic prosperity, and quality of life; and identification of the means to achieve these interdependent goals. To develop such understandings will require a collaborative effort that brings all of the information, skills, history, and knowledge of people and organizations together. NRCS has organized itself to facilitate these collaborative efforts, focusing on locally led partnerships as a primary objective.

It is hard to overstate the importance of effective, locally based action in achieving our national goals for conservation in America. An old cliché suggests that we "think globally and act locally." Such thinking can only be statistical, according to author Wendell Berry. "Look at one of those photographs of half the Earth taken from outer space and see if you can recognize your neighborhood," Berry suggests. "If you want to see where you are, you will have to get out of your spaceship, out of your car, off your horse, and walk over the ground."

Berry goes on: "If we could think locally, we would take far better care of things than we do now. The right local questions and answers will be the right global ones. The Amish ques-

## Partnership Profile: Coastal America

Coastal America integrates the expertise and resources of 12 Federal agencies with state and local agencies, tribal governments, and the private sector to address environmental problems along the Nation's coasts. Coastal America's Federal partners include the U.S. Departments of Agriculture, Defense, Army, Navy, Air Force, Commerce, Energy, Housing and Urban Development, Interior, and Transportation; the U.S. Environmental Protection Agency; and the Executive Office of the President.

More than half the U.S. population resides in the narrow band of coastal counties, where densities are more than four times the national average and increasing rapidly. Human activities in these and inland areas with watersheds that reach the coast profoundly affect coastal ecosystems and jeopardize the economic value of coastal tourism, fisheries, property values, and public health and safety. In 1992, the partnership identified habitat loss and degradation, nonpoint-source pollution, and contaminated sediments as primary issues, but its focus has broadened over the years as projects succeeded.

A central goal is to determine how various authorities and programs can be integrated to protect and restore the Nation's coastal resources while supporting valuable economic activities. Like the best partnerships, Coastal America brings together the

partnership agencies and stakeholders to garner innovative ideas and to identify the fine line that balances competing interests. The Federal partners and nonfederal stakeholders also combine authorities and pool resources to accomplish objectives that no one agency could accomplish alone.

Coastal America is as much a process as a program. It is a national partnership, but objectives are set at the regional level and incorporated into collaborative plans. Projects are then implemented at the local level in direct response to the problems and priorities identified there.

Since 1992, Coastal America has initiated 180 projects in 26 states, two territories, and the District of Columbia; the projects are being conducted in collaboration with more than 300 nonfederal partners. Projects typically strive to achieve sustainable development and to supply "multiplier benefits." For example, maintenance dredging of a Federal navigation channel in California's Petaluma River enhances water access and provides clean dredged material for restoration of tidal wetlands in a region that

has lost more than 98 percent of its original wetlands. Once completed, the current projects will have contributed to habitat for more than 20 endangered species, restored in excess of 100,000 acres of wetlands, reestablished hundreds of miles of anadromous fish habitat, instituted best management practices on farms in more than 50 watersheds, improved local economies, and generated numerous public educational products.

Coastal America is often cited as a model for other partnerships.



tion, 'What will this do to our community,' tends toward the right answer for the world," as does the question posed by Native Americans, "What will it do for seven generations hence?"

## A Renewed National Commitment

As we approach the next millennium, our Nation is in the process of reassessing the importance of long-standing institutions. In a major restructuring of the U.S. Department of Agriculture and its purposes, we have reaffirmed our commitment to a national effort for conservation on private land. The Soil Conservation Service has been renamed the Natural

Resources Conservation Service. The mission of the agency has been broadened, but NRCS retains its historic role of promoting the sustainable use of private land by providing information, delivering technical assistance, and encouraging voluntary adoption of conservation measures by private landowners. The new name formally acknowledges the long-held recognition that conservation is more than preventing soil erosion, that soil or water or other natural resources cannot be managed in isolation from one another.

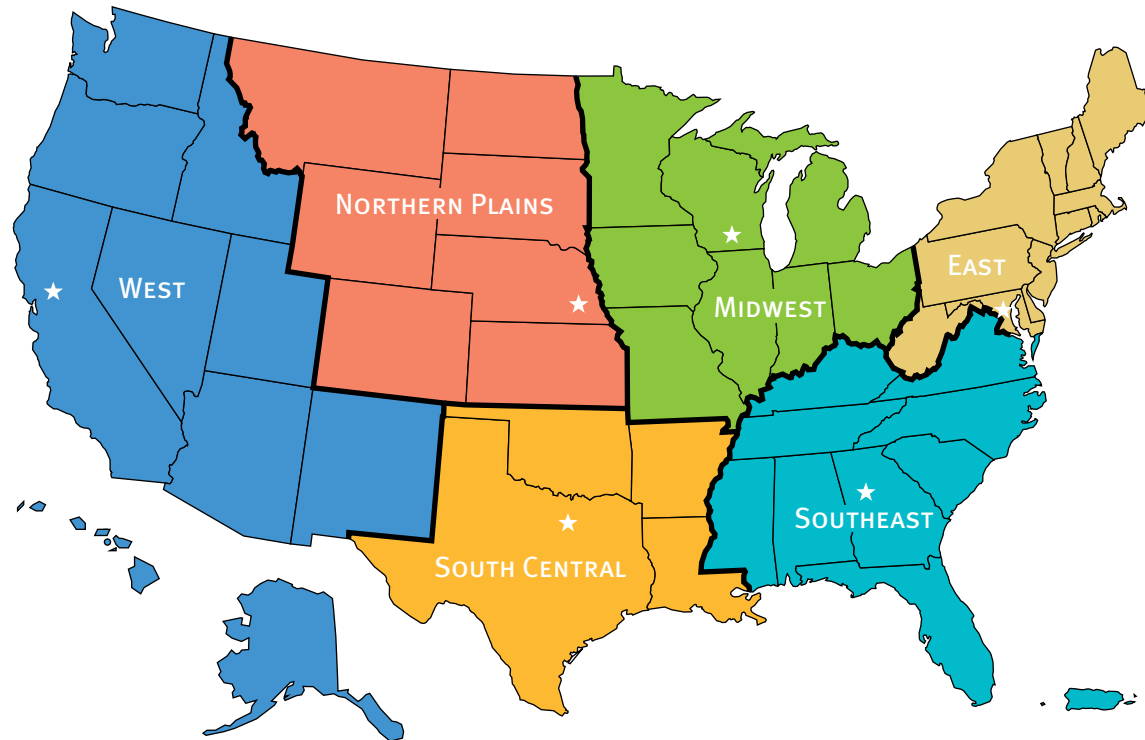
To carry out this expanded mission, NRCS has changed its organization to ensure greater regional and local emphasis.

### NATURAL RESOURCES CONSERVATION SERVICE REGIONS

★ Regional Office Locations

East: Beltsville, Maryland  
Midwest: Madison, Wisconsin  
Southeast: Atlanta, Georgia  
South Central: Fort Worth, Texas  
Northern Plains: Lincoln, Nebraska  
West: Sacramento, California

Source:  
USDA/NRCS, #RWH.1797, 1996





## NRCS Employees: On the Ground and Working

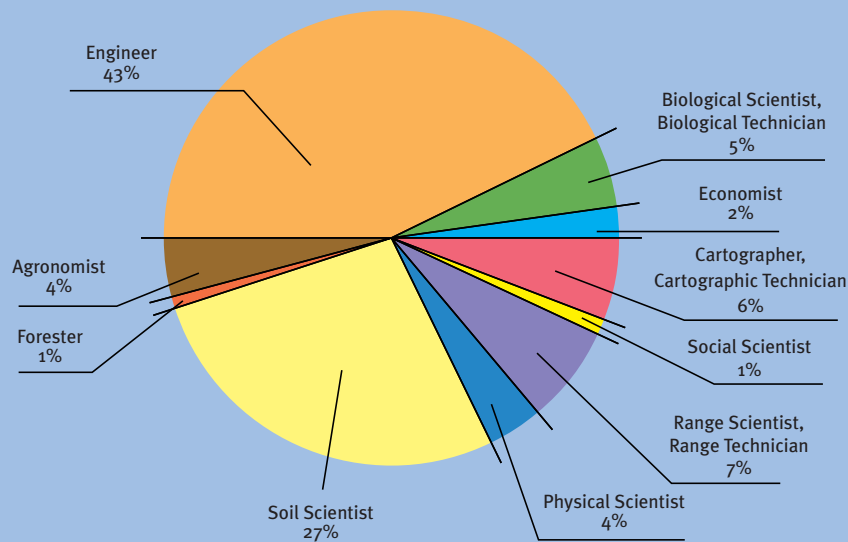
Hugh Hammond Bennett's vision of the Soil Erosion Service was one of scientists and technicians working directly with landowners to correct existing problems and prevent new ones from arising. Even as the agency has evolved—into first the Soil Conservation Service and more recently the Natural Resources Conservation Service—it has retained Bennett's vision of a hands-on, field-oriented agency.

Nearly half of today's multidisciplinary workforce is classified in a job series called soil conservationist—a job that requires formal education in soils and other physical or biological sciences. Most of the agency's soil conservationists work in county or multicounty offices helping individual landowners and local organizations and governments identify and address natural resource issues and problems. Nearly 30 percent of the agency's workforce provide scientific

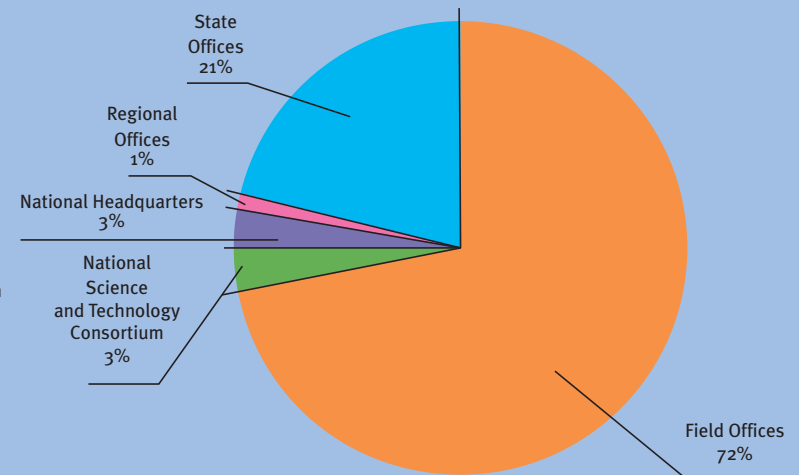
and technical support, directly or indirectly, to the field staff.

Nearly three-fourths of NRCS employees are stationed in some 2,500 field offices—in nearly every county—across the Nation. The rest are in administrative and technical support roles in national headquarters, institutes, and centers that foster development and transfer of science and technology and in regional and state offices.

SCIENCE AND TECHNOLOGY OCCUPATIONS IN NRCS, AUGUST 1996



WHERE DO NRCS EMPLOYEES WORK? AUGUST 1996



The 1996 farm bill—the Federal Agriculture Improvement and Reform Act—reinforced those actions by encouraging a shift in focus away from Washington, DC, toward regional and local leadership. In addition, the 1996 Act emphasizes the need to augment the traditional goals of conservation—supporting and embracing the production of commodities—with a new focus on the production of environmental commodities that are of increasing interest and value to all Americans.

The new organization moves many of the functions formerly centered in the national headquarters to six new regional offices. Within each region, where natural resource, social, economic, and cultural conditions are similar, the national vision of

productive, sustainable communities in harmony with a healthy land can be shaped to the realities of that region. Resource assessment and strategic planning activities can be better focused, continuous, and more responsive to local conditions. This will ensure that rapidly changing situations on the land are detected sooner and included in rapidly available assessments that can be shared.

Communication can occur vertically and horizontally so that individuals and communities can have broad program guidance while innovative, local problem-solving strategies are recognized and shared quickly with others. Information and resources, including financial resources, from public agencies and private

### The 1996 Farm Bill's Commitment to Conservation

The 1996 Farm Bill, passed by Congress and signed into law by the President on April 4, 1996, has been heralded as the most progressive environmental farm bill to date. Conservation provisions in the legislation will affect farmers well into the next century. The new provisions build on the conservation gains made by landowners over the past decade. They simplify existing programs and create new programs to address high-priority environmental protection goals. The key provisions:

- Environmental Quality Incentives Program consolidates four existing conservation programs (Great Plains Conservation Program, Agricultural Conservation Program, Water Quality Incentives Program, and Colorado River Basin Salinity Control Program) and directs cost-

sharing and technical assistance to locally identified conservation priority areas. Half of EQIP funds are dedicated to livestock-related conservation problems.

- Wetlands Reserve Program and Conservation Reserve Program are extended through 2002.
- Farmland Protection Program provides assistance to states that have farmland protection programs to purchase conservation easements.
- Swampbuster and wetlands provisions from the 1985 and 1990 Farm Bills are modified to provide farmers with more flexibility to meet wetland conservation requirements.
- Wildlife Habitat Incentives Program helps landowners improve wildlife habitat on private land.
- Flood Risk Reduction Program provides incentives to move farming operations off frequently flooded land.

- Emergency Watershed Protection Program allows purchase of floodplain easements.
- Conservation of Private Grazing Land Initiative offers landowners technical and educational assistance on private grazing land.
- National Natural Resources Conservation Foundation is created as a nonprofit corporation to foster conservation research, education, and demonstration projects.
- Conservation Farm Option allows farmers with market transition contracts to consolidate CRP, WRP, and EQIP payments annually, under a 10-year contract, in return for adoption of a conservation farm plan.
- State Technical Committee membership is broadened to include agricultural producers and others with conservation expertise.

organizations can be assembled through a partnership approach that reduces duplication and increases value for all.

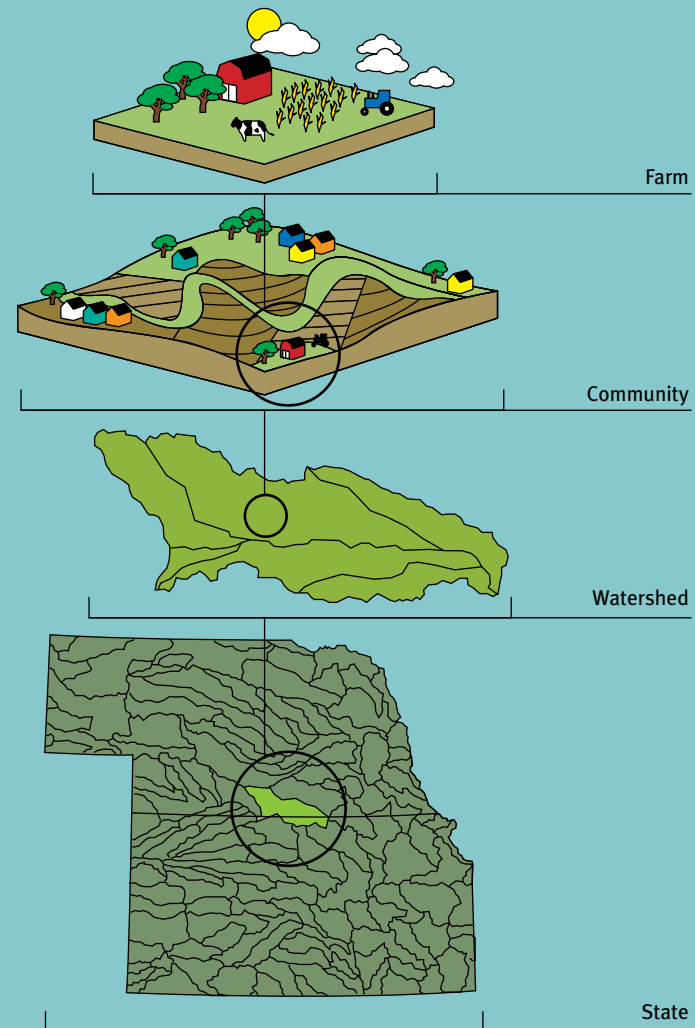
The focal point for locally led assistance and technical help for individual landowners is the network of NRCS field offices maintained at nearly 2,500 locations across the country. Those offices provide the point of contact with local conservation districts as well as related community groups and units of government. Field-office staff members, working with conservation district staff members and other partners, assist in developing individual conservation plans and applying soil and water conservation measures on all private land—agricultural and nonagricultural. They work with community groups in developing locally led approaches to conservation at the county, watershed, or other geographic level. Local NRCS offices are supported by multicounty and state office staffs featuring technical specialists, such as soil scientists, agronomists, biologists, engineers, sociologists, and economists. Their expertise can be used to address difficult problems, both new and old.

## Locally Led Conservation

NRCS has reaffirmed its 60-year commitment to locally led conservation as one of the most effective ways to help individual landowners and communities achieve their conservation goals through a voluntary approach to land stewardship. The land area in question will vary, depending upon the goals and desires of the landowner and community interests involved, but typically, that area will be defined by natural boundaries, such as a landscape or watershed.

Effective, locally led conservation offers an opportunity to bring together—under the leadership of local conservation districts—all of the people who care about their “home place.” Included will be the landowners themselves, as well as all others

## Relationships of Site-Specific Management to Broader Ecological Areas



Source:  
Adapted from U.S. Environmental  
Protection Agency, 1993



whose lives and futures might affect or be affected by what happens on the land. Locally led conservation brings downstream neighbors affected by what happens in their home place into the process of developing effective, voluntary approaches to conservation.

Locally led conservation brings people together to assess their home place, to set goals, and to identify programs and other resources that can be used to create the home place they want. People working together as neighbors find solutions to common problems and agree on ways to implement those solutions.

Locally led conservation means neighbors working together as the foundation for effective conservation, facilitating effective communication, achieving mutual understanding, and forging partnerships. Its success is based on finding common ground and developing shared conservation goals and shared responsibility for achieving those goals. Neighbors—farmers, ranchers,

*Locally led conservation brings people together to assess their home place, to set goals, and to identify programs and other resources that can be used to create the home place they want.*

rural and urban residents alike—take responsibility for their share of conservation.

Locally led conservation depends upon the creativity of those who participate to find ways of using all the resources available throughout the community, from both governmental and nongovernmental sources. All U.S. Department of Agriculture programs become tools, along with other Federal, state, and local government and private-sector programs, to be

used in an integrated fashion to achieve common goals.

Those who participate in locally led conservation efforts often include people and groups who value the land for very different reasons and in very different ways. As they come together to understand the land in a particular area, they are often able to focus far more clearly on the shared visions they may have for their home place. Where natural resource conditions and needs can be assessed, goals defined, opportunities and constraints identified, and responsibilities clarified, plans of action can emerge that have a good chance to succeed because the plan is rooted in a shared vision and responsibility.

The NRCS role in locally led conservation varies according to what a community needs. In addition to serving as a catalyst for locally led conservation efforts, the agency's role is to speak for the health of the land and the people who both work the land and depend upon it. NRCS supports, facilitates, and informs the process of locally led conservation by providing natural resource inventories and assessments, planning assistance, and technical assistance.

Informed citizens are fundamental to making informed choices. People's expectations must be consistent with what the land can provide, both in terms of agricultural commodities and environmental benefits. People need to understand their opportunities to avoid natural resource degradation or environmental pollution and to achieve their goals.

To help people understand their land and its natural resources—their home place—NRCS is working on new technologies to display and disseminate information. Computer-generated maps, for example, can illustrate where specific problems exist and the opportunities to make things better.

Emerging computer technologies can help answer all-important “what if” questions that concern residents in the local area:

- What will happen to water quality in the nearby lake or stream if farmers adopt a new form of conservation tillage?
- Will farmers and ranchers prosper using new technologies; should the cost of those technologies be shared by their neighbors?

- How often will our new park flood, and how far out will the floodwater extend?”

Computers cannot make decisions. Only people can. But computers can help. Knowing what is likely to happen is better than operating with no knowledge whatsoever.

One sure thing about locally led conservation is this: The more it is used, the better it gets. The more people work

## Ohio: Low-Interest Loans for Conservation

Imagine getting a below-market-rate loan for conservation! The Ohio Environmental Protection Agency (OEPA) has been offering just such loans through its Water Pollution Control Linked Deposit Program. The loans may be approved for any practice, equipment, or management change that will have a positive effect on water quality; the farmer’s interest rate is about 3 percent below the going market rate.

A participating farmer works with the NRCS district conservationist to prepare a farm plan, looking at the farm’s entire resource base—soil, water, trees, livestock, wildlife, and other factors. If the plan is approved, the farmer is given a Certificate of Qualification, which he or she takes to a participating bank. The bank determines the credit worthiness; the OEPA, NRCS, and the local conservation district determine conservation worthiness.

According to Barry Cavanna, the NRCS district conservationist who coordinated the first linked deposit program in Ohio’s Killbuck Basin, the most important criterion is flexibility: “We set no parameters here; if it’s related to pollution control, we’ll buy in.”

One loan paid for the manure storage, watering facilities, fencing, and other necessities for a dairy farm to convert to rotational grazing. Other loans have financed grassed waterways, barn roof gutters, manure treatment and handling facilities, erosion control practices, and milkhouse waste handling. Says Cavanna, “We’re even working with one farmer to buy a semi with a tank hauler so he can haul manure from his main farm to outlying farms.” In the Killbuck Basin, there have been 13 loans totaling more than \$1 million.

In the Darby Creek watershed, 32 comprehensive farm plans were completed in the first 6 months of the program; 25 or 26 loans were made, totaling about \$1 million, according to Wes Beery, an NRCS employee serving as agriculture coordinator for The Nature Conservancy’s Darby Creek Project. OEPA has set aside \$9.3 million for about 40,000 acres of priority area, a 1,000-foot band on either side of the Darby. “The loans are for the whole sweep of nonpoint-source pollution,” Beery says.

Water quality coordinator Mary Ann Core says certificates have been issued for loans

for more efficient pesticide sprayers, animal waste control systems, and revamping fertilizer storage areas, as well as for yield monitors on combines. The monitors, she says, are “a first step toward precision farming, so they can do more micromanagement. In the end, that will mean better placement of fertilizer and herbicide, which also ties to soil quality and fertility.” One farmer has sought a loan for a global positioning system receiver to map fields for yield, weeds, and fertility levels, which would improve his application rates for pesticides and herbicides. Says Core, “I think this is great because it teams the local bank, soil and water conservation district, NRCS, and OEPA with the farmer, and the farmer is generating what he or she wants to do. And it’s not a government handout; the farmer must borrow and repay the money.”

Cavanna credits OEPA for being flexible and “fantastic to work with.” Beery says that the involvement of everyone from bankers to farmers has been “a real education for all concerned and may have spin-off benefits greater than the individual loans and projects.”

## Locally Led Conservation: More Than the Sum of Its Parts

### Nebraska: The Rainwater Basin Joint Venture

*I went from agency to agency looking for help on wetland restoration, recreational use, erosion reduction, wildlife habitat protection, but I got different pieces from each, and couldn't do much on my own. When all the specialists came to my place with the bioengineering team, though, it was different. In a couple of hours they got together.*

Dennis Oehlschlager, Farmer,  
Saline County, Nebraska

The competition over land use—between farm and wetland, agriculture and waterfowl—has been intense in Nebraska's Rainwater Basin. Enter Steve Moran, a 17-year engineering veteran of the Natural Resources Conservation Service, who began the Rainwater Basin Joint Venture in 1995. Moran realized that landowners and government agencies were not really communicating. This became particularly clear in a meeting where a sister agency representative explained to some landowners that “We need up to 18 inches of water from February through March for the migratory

waterfowl”; the landowners replied, “it's not the zero to 18 inches of water in March that bothers us, it's the 2 feet of water in August after we have our crops in. If you'll talk about stopping flood damage, erosion control, shortage of irrigation water, and help us overcome common barriers we have as landowners, we'll talk about the zero to 18 inches'.” That was a powerful lesson, says Moran: “You don't talk to people about what you need, but about what they need.”

Listening and discussion sessions led to landowners and agencies agreeing on common issues to be addressed. The agencies worked together to provide the resource inventories and technical assistance the landowners needed to make their own decisions and develop plans. “Now,” says Moran, “we're giving new meaning to the phrase ‘one-stop shopping’.” The Joint Venture brings the different agency experts together as a bioengineering team, and they go to the farmers.

Dennis Oehlschlager, a farmer with 240 acres on the northwestern edge of the Rainwater Basin, had been to different agencies but could only get pieces of the picture. Says Moran, “We brought one biologist from the U.S. Fish and Wildlife Service and one from Nebraska Fish and Game, an engineer from NRCS, a resource specialist from the conservation district, and [Dennis] stood back and watched the folks put the puzzle together for him.” The result: They went from initial discussions in April to project completion in August.

Oehlschlager's project involved constructing a 2.5 foot-high dike to create shallow-water habitat and control gully erosion that was depositing sediment on a neighboring pasture. Approximately 1,300 cubic yards of earth fill was used to build the dike, with the water level controlled by a pipe system designed to drop overflow water to a stable outlet structure. The construction costs were shared by the Nebraska Soil and Water Conservation Program of the Lower Big Blue Natural Resources District, the Wetlands Initiative Program of the Nebraska Game and Parks Commission, and the landowner.

Moran says that after nearly 2 years the planning process has evolved. Now, the broad range of issues are considered—habitat, flood control, irrigation water, communications. Although it takes enormous energy, according to Moran, “it's an approach that is necessary. Any benefit for wildlife is a byproduct of other practices. We have to get away from the all-or-nothing philosophy that keeps things pigeon-holed.”

*Farms and ranches throughout the United States produce traditional and nontraditional commodities. Dennis Oehlschlager's farm, for example, produces corn and other row crops and his restored wetland provides an important rest stop for migratory waterfowl.*



### **New York: The Skaneateles Watershed Program**

The City of Syracuse, New York, is trying to avoid filtering to keep its water supply safe and healthy. Under the Skaneateles Lake Watershed Program, Syracuse is prepared to spend \$17 million over 10 years to protect water quality in Skaneateles Lake from which the city draws its water. The program will assist farmers to install pollution-preventing practices on their farms, promote land conservation programs on nonfarm land, and, in collaboration with other agencies, educate watershed residents so they can protect water quality on their own. The program, modeled after one developed for New York City, intends to reduce nonpoint-source pollution in hopes of avoiding an estimated \$40 million to \$50 million investment in a filtration plant. Syracuse, like New York City, has one of the few unfiltered water supplies in the country; both opted for land treatment as their preferred alternative.

Lee Neville Macbeth coordinates the Skaneateles Watershed Program for the City of Syracuse. Building public trust through outreach and education has been an important element from the outset. NRCS and conservation districts helped farmers and the city to form the original Agricultural Ad Hoc Task Force. As Macbeth says, farmer acceptance of the proposed program structure was needed to make it work.

The Watershed Agricultural Program, managed by Jeff Ten Eyck, employed a three-tiered approach, essentially a risk assessment, with the most attention paid to those farms posing the greatest threat to water quality. In the summer of 1996, preparation and implementation of tier-3 farm planning had begun for seven farms with the more serious conservation needs.

The first step was to undertake plans for dairy, sheep, beef, and crop farms as prototypes and then develop plans for the high-priority farms to get at the flow of priority pollutants—nutrients, pathogens, and sediment—to the lake. Syracuse will provide up to 100-percent cost-sharing for best management practices, such as erosion control measures, intensive rotational grazing, barnyard water management, and nutrient management. One crop farm that is adopting contour farming is expected to reduce soil erosion by some 332 tons on 240 acres.

The early agricultural emphasis was to address the pathogen pathways posing health concerns. As the program moves forward, there is increasing attention to non-agricultural land. Macbeth says the city is working with local land trusts to encourage the acquisition of conservation easements, sponsoring seminars and providing technical assistance to nonfarm landowners, and collaborating with Cornell Cooperative Extension Service to provide education to municipalities and businesses and to watershed homeowners. A consor-

tium of smaller towns in the watershed, some of which draw their water from Skaneateles Lake, is being organized to ensure that they have access to good information.

The Watershed Agricultural Program can produce multiple benefits beyond protecting Syracuse's water supply, according to NRCS State Conservationist Rick Swenson. "If the land is kept in farming," he says, "the open land can provide aesthetic values, conserve biodiversity, and protect wildlife habitat, as well as improve water quality. More intensive agriculture or sprawl would surely make a filtration plant inevitable for Syracuse."

### **Ohio: The Soil and Shipping Connection**

To deal with harbor sediment, you dredge, right? Nope, you try dredging avoidance, in the words of the Toledo Port Authority's John Loftus. You help farmers to reduce soil erosion on the land. This means getting the dredgers—the U.S. Army Corps of Engineers and the Port Authority—together with the people who own the land that erodes: the 4 million acres (3.2 million in crops) in the harbor's drainage basin, principally around the Maumee River and its tributaries. Fortunately, many of Ohio's farmers began adopting conservation tillage practices in the 1970s, when they joined in efforts to reduce phosphorous loading in Lake Erie—one of the causes of the lake's near-death.

## Locally Led Conservation: More Than the Sum of Its Parts *continued*

It hasn't been easy. The Toledo Harbor-Maumee Basin effort has brought together agencies and people with seemingly unbridgeably different responsibilities. Once you think about possibilities, however, the connections among stakeholders are obvious. Nearly 25 percent of the 13.5 million tons of cargo shipped through the Port of Toledo each year comes from farms. Maumee Basin farmers were shipping not only their grain but also their good soil to Toledo. Preventing soil erosion reduces the dredging burden and benefits the farmers by keeping the soil on the land.

Cultural differences made communication between agencies difficult at the project's outset, but now the agencies are working together to reduce harbor sedimentation by a conservative 15 percent. According to NRCS coordinator Gary Overmier, the inter-agency agreement is probably unique in that part of the funding for the project—\$700,000—is coming from the Army Corps of Engineers, while NRCS is providing offices, staff, and technical expertise. The Ohio Environmental Protection Agency's revolving loan fund and other agency funds also are available for certain local erosion control initiatives.

NRCS and local conservation districts have set up Sediment Reduction Committees to work with farmers on soil erosion reduction initiatives. By summer

1996, a number of conservation district projects had started, including adapting planters for conservation tillage, installing riparian corridors and windbreaks, planting grassy strips in gently sloping waterways, and holding field days to showcase new technologies and tools. The initial emphasis has been on education and demonstrations. The next phase, according to Overmier, is for NRCS to work one-on-one with farmers to develop farm resource management plans. Although the main objectives may be to reduce soil erosion in the Maumee Basin and sedimentation in Toledo Harbor, multiple benefits will result, including improved wildlife habitat and water quality enhancement.

Lake Erie continues to make a comeback. In 1992, Lake Erie anglers hauled in more than 2 million walleyed pike, up from a mere 113,000 in 1975. Sedimentation avoidance is one way to build on that success.

### **California: Working Together for Salmon**

*Its a hard concept. On the farm you plant and harvest the seed you sow, and you are responsible for it on your own place. Salmon, on the other hand, have their seeds planted in the upper watershed, but they are harvested in the ocean. It reminds us how humble we need to be in terms of how complex these systems are. The salmon fishery presents common ground and is making it easier to get people together.*

Tom Schott, District Conservationist, NRCS, Ukiah, California

Tom Schott is one of hundreds of people trying to restore the salmon and steelhead fishery in the Pacific Northwest. That fishery has been decimated by a combination of human activities and natural events. Dam building, goldmining, logging, farming and ranching, and overfishing, as well as floods, drought, earthquakes, and even El Niño, have affected the salmon and their habitat. In northern California, the commercial salmon fishery has been effectively closed for nearly a decade. Since 1954, California salmon and steelhead stocks have declined by 80 percent and Central Valley dam construction has reduced the river reach available for migrating salmon and steelhead by 95 percent.

Major efforts are now under way in California, Oregon, Washington, and Idaho to reverse the fishery decline. Every aspect of land and water use is being addressed, including current activities—timber management, agriculture, and development—and problems left over from past activities. “If you don't start at the top of the mountain, you won't solve the problem,” says Paula Yoon, who had previously made her living from the northern California fishery. Farmers, ranchers, and other landowners are taking part in numerous programs to improve stream values and salmon habitat.

Bob Falge, a retired sawmill worker, now a rancher, participates in the salmon recovery effort. Falge remembers: “The 1964 flood tore most vegetation off streambanks and put a lot of gravel in the streams. We had trouble getting new trees and foliage



established along the streambanks because deer and livestock ate it right off.” NRCS’s Schott proposed “exclusionary fencing” to account for “seasons of sensitivity.” Although initially skeptical, now Falge is a convert. After the fencing, “all these little trees got started on their own in the fenced area. There are trees in there now after 5 years that are 12 and 15 feet tall. Nature brought it all back, being that the deer and livestock couldn’t get in.”

With cost-share assistance from several Federal and state agencies, Falge also has installed sediment-retention structures. “We’ve been fortunate with them helping out,” says Falge, who adds, with obvious pleasure, “In 1994 there were five salmon I saw here in the stream. Fish and Game wanted me to call if ever I saw any. There were no females, all males. I saw two this year, and I think they were a pair and might have spawned. Now, 2 years in a row, we’ve seen some come back.”

One novel program hires displaced salmon fishermen to work on salmon habitat restoration. The U.S. Department of Commerce is funding the Northwest Emergency Assistance Program, which NRCS and its resource conservation district partners help administer. In four northern California counties—Del Norte, Humboldt, Mendocino, and Sonoma—displaced fishermen are performing salmon habitat needs assessments and restoration on private land in a number of watersheds.

One program participant is Yoon, who serves as the outreach coordinator for the Fishermen’s Jobs Program of the Humboldt County Resource Conservation District and works with private landowners. “Some of those [landowners] are large timber companies, and there is an important level of communication about the salmon industry in relation to natural stocks. We are a direct reflection of what happens to an industry if its habitat or resource base isn’t taken care of. It could happen to timber or agriculture [as it has happened to fishing].”

Cooperation between fishermen and landowners in the Northcoast Habitat Restoration Program is helped by familiarity. According to Gary Friedrichsen, also a displaced fisherman working in the program, fishing and logging were the two predominant blue-collar job opportunities, “and there was quite a bit of crossover.” Bill Matson concurs: “Most of my family worked in the woods. My father did, in between fishing seasons. Most fishermen have done the same, fishing in the winter and working in the woods in the summer.”

All participants—landowners, fishermen, scientists, and government officials—recognize the enormity of the challenge. Says Schott, “One problem is that we [NRCS] have tended to work only with farming indicators, while others do water quality, wildlife, etc. We are not yet successfully integrating our monitoring to look at the whole picture. We are just beginning to get people together; and people are just beginning to understand the broader picture.



*Restoration of riparian vegetation was largely a matter of installing exclusionary fencing to control deer and livestock access. The riparian zone was nearly denuded (top) when Falge’s project began. Five years later, planted and volunteer trees were well-established (bottom).*

Terms like ‘health’ are important, but even defining that takes work. Peer acceptance is half the battle of working with different groups.” Still, Schott is not overwhelmed. “The cheapest conservation we can get,” he says, “comes from working with nature.”



## Locally Led Conservation: More Than the Sum of Its Parts *continued*

### Mississippi: Multiple Conservation Benefits

Lake Washington, a 3,000-acre Mississippi River oxbow lake about 30 miles south of Greenville, was in trouble in the 1980s. Deep trouble. “When it rained three or four inches, the lake would be like chocolate milk,” says Ronnie Hudspeth, District Conservationist, NRCS. With 70 percent of the watershed in cropland and high phosphorus levels in the lake, agriculture—and at least one community generating untreated sewage—were seen as the major culprits.

In five years, Lake Washington has come a long way. Best management practices—no-till cultivation, filter strips, and grade-stabilization structures to reduce sediment flow—have been applied by most of the 30 or so farmers on the 20,000-plus acres of cropland. The town of Glen Allan has a sewage system. There’s a new bed-and-breakfast on the lakeshore, and two new bait shops.

“When we first got started, people wanted the program, but they weren’t really sure they wanted to do the things needed,” says NRCS area agronomist Ken Ainsworth. Mark Gilbert of the Mississippi Soil and Water Conservation Commission says that “we learned you need to have some type of meeting and really lay our cards on the table. The one-on-one relationship with that farmer [such as NRCS and the districts have] is the key, because it shows the farmer that the agency cares about what he or she is doing.” Numerous state and Federal agen-

cies were involved, many of them offering financial incentives, and the nonprofit Lake Washington Foundation helped individuals with their portion of cost-share money.

One innovative grade-stabilization structure, effective on the very gradual slope of the Delta, is an elevated turn row constructed at the low end of a field. Farmers are accustomed to having a drain pipe at the lower end of a field to drain water off at any season. Now, flashboard risers hold the water in during the winter. This simple structure:

- Lets sediment settle out and remain in the field.
- Keeps nutrients (phosphorus) attached to soil particles rather than running off to adjacent waters.
- Maintains standing water that prevents winter weed growth, reducing the need for tillage and herbicides before spring planting and improving soil moisture for the spring.
- Maintains seasonal wetlands with ample crop residue as prime waterfowl habitat.

The million-dollar effort to clean up Lake Washington has paid dividends to the farmers, area homeowners, and recreational users of the lake. Lessons learned on Lake Washington already are being applied to other oxbow lake cleanups in the Delta area, especially the need for early involvement of all interested parties and for developing partnerships among government agencies at all levels and between agencies and private landowners.

together, the easier it gets. As the agreed-upon actions are implemented, their success or failure can be discussed and compared to what had been expected. New experience fosters better understanding of the land, and new opportunities may appear. Individual landowners and managers can see how their own actions fit with those of other community members. Information, not coercion, becomes the most powerful force helping individuals and communities achieve their goals, and the national conservation vision of a healthy land is furthered by the voluntary approaches that have worked.

## Conservation on Farms and Ranches

Because most private land in America is used to produce agricultural commodities, most conservation efforts by NRCS and its state and local partners, including the conservation districts, have been directed to farmers, ranchers, and owners of small woodlots. Although the agency serves an increasing variety of nonagricultural clients with both information services and locally led planning assistance, helping to sustain the Nation's agricultural land remains the highest priority within NRCS.

Most technical assistance provided by NRCS is based on the voluntary development of a conservation farm or ranch plan—a resource assessment of the farm or ranch that allows landowners or managers to determine the opportunities for using the resources under their care and how they may achieve their goals. A successful plan helps the individual landowner achieve his or her business and personal objectives while, at the same time, meet his or her responsibility to care for the land.

Agriculture in America is diverse, ranging from small farms or ranches with limited resources to large, highly sophisticated enterprises. The information, planning, and technical assistance needs of farmers and ranchers are equally diverse, and

assistance to each must be tailored accordingly. What remains consistent throughout, however, is the underlying theme for NRCS: To help each landowner achieve a sustainable system that contributes to healthy bottomlines as well as healthy ecosystems, landscapes, and watersheds.

At its best, the conservation farm or ranch planning process strengthens the ability of landowners—and communities—to manage change and even define a positive course of action, rather than simply reacting to challenges as they appear. The future surely involves changes in technology, natural resources, social values, and goals. Landowners and communities seldom believe that they can pursue a particular course of action indefinitely. Instead of a single, rigid plan, they need a basis for reacting adeptly to the changes that affect their operations and their home place. Being close to the land day to day provides the opportunity to observe and adjust to change early on. Good conservation plans facilitate such ongoing adjustment. This is the kind of adaptive management that is the hallmark of successful businesses, communities, and ecosystems.



Larry Lefever / Grant Hedlman Photography

## Conservation Begins With an Individual's Decision

### Iowa: Diversifying Agriculture

*Ten years have made a big difference. I don't think we'll see the rip, tear, and gouge we saw in the seventies and eighties. A lot of the young men saw that happen, saw the results, and they are going to manage well, take their profits to the bank and smile. It's a totally different generation. They've seen the low, they've seen the high, and they are smarter for that. Our environmental concerns have changed. Our experts have changed. Farmers have changed. It's a whole new ballgame. There won't be fencerow-to-fencerow planting.*

David Van Waus, Farmer,  
Colo, Iowa

David Van Waus farms 1,000 acres of corn and soybeans in Story County, Iowa, with his brother-in-law, who raises 1,300 hogs. They own half the land and rent the rest. Van Waus says they have built about 17 miles of terraces in the last 10 years, “by ourselves, with

nothing more than tractors and loaders and scrapers and an old three-point plow.” The farm is “right at the terminal moraine of the last glacier, so we have all types of soil—some 100 percent sand and some of the best soil in the world. I want to make sure that soil stays on my farm and not down some stream. That top 4 inches is my livelihood.”

On his terraced areas, Van Waus says, most soils are very light, so he uses almost no tillage for soybeans, and there are terraces every 240 feet. Van Waus uses all the manure the 1,300 hogs produce, and in a dozen years he has restored some otherwise poor soils to an “extremely fertile” rating. He has also cut his need for commercial fertilizers to nearly none. The manure is knifed into the top 2 inches of soil (where the microbial action is highest) so it is absorbed, with the nutrients kept in place.

Van Waus strives for diversity, making decisions based on slope, soil condition, and weather. He varies his seed to protect against crop failure; corn rows are often 30 inches apart; soybeans range from 7.5-inch to 30-inch rows. This variation allows for different weather conditions: “Narrow rows demand more water and you can't cultivate, so it becomes a herbicide operation.... I try to grow a diversified crop, both corn and beans. I grow 105-day corn in the bottom areas because of the short growing season on that land; elsewhere, I might grow 118-day corn. That spreads the harvest time, too.”

Van Waus tries to plant no more than 20 percent of any one hybrid. “For soybeans, I might stay at 15 percent, depending on where they're planted, whether on sand or on good black soil. On lighter soils, I like to plant full-season corn and beans because they create more trash—vegetation—covering that lighter soil with more residue and working more organic matter back in, too.”

The Natural Resources Conservation Service district conservationist in Story County, Tony Maxwell, says Van Waus “looks at wildlife cover, the Conservation Reserve, and tree planting, but yet he makes his money growing corn and soybeans.”

Van Waus says, “Some day I'd like to get into the farm management system and make all farmers believers in soil conservation. Profitability is key, but mainly it's the togetherness of folks. People often forget the soil has been here for 10,000 years, and there's no more of it.”

### North Carolina: Protecting the Bog Turtle

*Yes, we did try to drain the bog. We used a hand pan; I ran the horses. It took only a few years for the alders to grow back, so we ended up just leaving it. I think it's pretty neat they found the turtle because there's so few of them.*

Avis Schuyler, Farm Owner,  
Lowgap, North Carolina

What was in the not-quite-drained bog were bog turtles—small, rare turtles that live in freshwater marshes, bogs, and fens ranging from Georgia through North Carolina and Maryland and into New York and Connecticut. What's so exciting about bog

*Diversification is David van Waus' operating principle—corn, soybeans, and an integrated production system. Van Waus has reduced his commercial fertilizer need to nearly zero, improved soil fertility, and uses tillage suited to soil characteristics.*



turtles? For one thing, they have been around more than half a million years, since the Pleistocene Epoch, according to Dennis Herman, a herpetologist who has studied the turtles for decades. Nearly 95 percent of their North Carolina habitat has been lost to agriculture and other development, and they are likely to be listed as endangered or threatened in some parts of their habitat. Herman was pretty sure when he saw the Schuylers' bog that it would contain bog turtles, and he was right.

"I was so thrilled we had a new site in Surry County and that I'd trapped a turtle. I just photographed it about 20 times, then I took it to the house and asked [Avis' daughter-in-law] Lisa Schuyler to hold it while I photographed her holding it," says University of North Carolina-Greensboro biologist Ann Somers, who works with Herman.

When the scientists were looking for ways to protect the little 4-inch turtles during mating, egg-laying, and rearing season,

*Landowner interest is critical to finding, understanding, and protecting bog turtles and their shrinking habitat.*



local NRCS District Conservationist Dick Everhart suggested that the remaining drainage ditch be plugged and that exclusionary fencing be installed to protect the turtles during nesting and hatching season. The Schuylers agreed. The fencing doesn't cause them any problems, says Avis Schuyler, who co-owns the farm with her son, Trent. "There's plenty of pasture, even with the bog fenced off. The cattle don't need to wade through that bog anyway."

Everhart says the Schuylers have opened their hearts to the little turtle and their farm to the researchers and conservationists who study the bog turtle and its habitat. One day they hosted 50 people, from Maryland to Georgia, who attended a workshop on bog turtle habitat. "One important area we're studying," Everhart says, "is how agriculture and this threatened species can coexist and how to restore and manage habitat in an agricultural setting."

The U.S. Fish and Wildlife Service helped pay for the fencing and will pay for restoration of the bog. The scientists set the traps, installed the electronic bugs on the turtles, and marked their shells with tiny V-shaped notches. But they have enlisted the whole Schuyler family, including Trent and Lisa's children, Miranda and Brannon, to help with record-keeping. They check the turtles three times a week, recording the hour, which trap, and which turtle. "By now," says Lisa, "we know some of these turtles."

According to a number of biologists, the bogs are formed and maintained by beavers, cattle, deer and, possibly, fire. Browsers—perhaps dinosaurs originally, but

rabbits, deer, meadow voles, southern bog lemmings, muskrats, cows, and horses today—help the bog turtles by keeping the canopy open, which creates a sunny and rapidly warmed layer above the cool, saturated mud. Herman says also that small herds of grazing cattle or horses prevent waterways from becoming weed-choked—some grazing in the bog helps the turtles. This advice was offered in the action plan Herman prepared for the North Carolina Wildlife Resources Commission.

A critical element in finding, understanding, and protecting bog turtles and their habitat is the interest of landowners. "[Dick Everhart] has had success with some landowners because they regard him as a neighbor and friend and are willing to open up to him," says Herman. "Many of the bog turtle sites are under an acre and impossible to find and worry about, so we have to depend on landowners to come to us. They won't if we regulate. If it's education and incentives, they may open up."

### **Texas: A Grass Explosion**

*What happens on the land is the cumulative effect of individual contributions—across the board.*

Rooter Brite, Rancher,  
Bowie, Texas

In the Red River country of Texas, near the Oklahoma border, sits Rooter Brite's 3,200-acre ranch, bought by his grandfather in 1929. During the 1930s, the land was horrendous, Brite says, with termites eating the grass below the surface. "People didn't know whether it would ever come back.



## Conservation Begins With an Individual's Decision *continued*

Much of the land was poorly managed, mostly as a result of overgrazing. One piece of land I got in the 1980s was so overgrazed, the cattle were leaving a browse line on the trees. One owner had brought in horses, and they raised the browse line even higher. Still, the country is pretty forgiving.”

The Brites “stocked to capacity every day, every year, with 15 or 16 cows per 150 acres—until 1969, when we did a single-pasture deferral, a 3-month deferral, and had a grass explosion!” Now, instead of seven pastures, there are 47 or 48. Because there are different classes of cattle (heifers and steers, bulls, replacement heifers, fall-calving cows, etc.), “we need lots of different pastures. We have a much better diversity of grasses, some of which I never even knew existed.” Generally, Brite’s pastures are about 80 acres, and the time cattle are kept in a given pasture depends upon herd size and type and time of year (whether forage is dormant or not).

Brite says, “My product is grass, sold through cattle.” Because the grasses are

better, he can keep more animals: Under the old system, Brite grazed one cow on 10 acres, and conditions were rated fair or poor. Now, all pasture is good to excellent, and he can graze 1 animal unit on as few as 5 acres. The individual weight of his cattle is down, but the net salable weight is up.

In 1995, Brite had his best year ever, with 5,000 pounds per acre of native forage, including Indiangrass, switchgrass, little bluestem, and big bluestem. Still, Brite didn’t increase his herd to levels that might have been sustained under those conditions, and he believes the grasses are in better shape as a result. With the drought, production in 1996 was down to 1,500 pounds per acre. Even so, “we’re baling hay out here right now, when a lot of neighbors don’t have any grasses.”

Fire is one means of enhancing grass health. “It can be very effective, but it also is very definitely a hazard,” says Brite. “Where we have used fire, we’ve been very successful. I’ve seen plants I’ve never seen before; the seeds were there, but dormant, and the fire breaks their dormancy. But there’s a lot that goes into deciding whether to have a fire or not. Some pastures don’t lend themselves to being burned; others we try to burn every 5 to 7 years.”

Gary Conner, the NRCS district conservationist in Montague, Texas, says fire has been used as a tool for 25 or 30 years for rangeland health in Texas. “If you don’t burn or at least shred off the grasses really close every so often, you’ll lose grass to disease.” He adds that there were some wildfires on about 8,000 acres of rangeland in his part of

Texas in 1996: “Luckily, they ended up being useful because a lot of oak timber and brush were set back and the canopy thinned, which will let new grasses take hold.”

Conner says Brite “gets down to the little things; he gets out there and sees things first hand. Now [in the 1996 drought], he’s baling hay, and next year, we’ll see the effect of that; he’ll learn from it. His place is visible, right on the highway, and some people are beginning to imitate what he’s doing.” Brite returns the compliment: “I have been opportunistic in taking advantage of things, including the NRCS. You can’t imagine the technical competence of NRCS folks. Many people don’t take advantage of them, but I do.”

Brite explains, “Economic sustainability is essential, but there may be overriding benefits that make something worth doing anyhow. In my operation,” he says, “I have to have diversity. In a lot of operations, you’re not allowed to have diversity, so people become tunnel-visioned.” He notes that some ranchers who run one kind of grass “do much better than I do—if the weather’s right and things cooperate. But in bad times, many sure wish they had a more diverse operation like mine. It’s like keeping a little money in the bank for when you get sick; we do the same thing with grass management.”

*Rooter Brite's diverse grazing operation in northern Texas has the resilience and stability to weather good and bad times.*



**Vermont: Healthy Cows and Happy Farmers**  
*I don't believe that cows got together 50 years ago and said, ' Lets build a barn for us to die in....' The best barn is an electric fence that lets a cow take care of herself—get sun, air, exercise, and comfort. I call it non-barn housing.*

John Rutter, Dairy Farmer,  
Bridgeport, Vermont

For years, John Rutter was dead set against rotational grazing. The 410 acres he owns and rents in northwestern Vermont has mostly clay soils, and he was convinced grazing would not work. Two things tipped the scale: The drop in milk prices in the early 1990s cost him \$100 a day every day for 2 years, and “the work was killing us, and we still weren’t making any money for the long run.” Rutter had a traditional stanchion barn where, he says, he spent most of his time doing chores: Hitching cows, feeding grain, sweeping up grain, scraping the platform, washing cows, milking. And then repeating the cycle.

In 1993, Rutter experimented by grazing some heifers and dry cows. “We were so impressed that we weren’t handling all the materials—manure, feed, etc.—and all we had to do was move fence.” That fall, Rutter took a bigger plunge, fencing 160 acres with high-tensile wire, with portable reels between division wires, and installing 20,000 feet of water line.

“It was catastrophic. We had a 35-percent decline in milk production! It is a difficult mental shift for both operators and livestock. After all, the cows were used to being

fed and having bedding put underneath them; everything was done for them.”

Nevertheless, Rutter stuck to his guns. He made other changes, and now he is a staunch advocate of working with grasses to meet the needs of the cows. Rutter uses an adapted New Zealand-style, flat walk-through barn, with one 8-stall area on each side, which allows a steady stream of cows in for milking. He also has been experimenting with different grasses and using some nitrogen supplements to raise the dry matter and density the cows need. Rutter’s neighbor, John Roberts, another grazing pioneer and advocate says, “If you ask the cows to consume over too large an area, when density is too low, they will get bored or tired, and may not eat to full appetite. As the pastures grow better...the cows don’t have to spend so much time grazing in order to take in the amount of dry matter they need.” Rutter harvests grass silage after the initial grazing. In 1995 he harvested almost all the silage he needed to store for the winter.

Rutter has shifted many of his cows to June breeding (the conception rate appears to be up from about 50 to 75 percent), so calves are born coinciding with the spring flush of grass. In the spring of 1995, 106 of Rutter’s dairy herd freshened and by July, 131 cows were milking; only 18 were dry.

Since he began grazing his cows Rutter has noticed many improvements:

- Milk production from his milkers is back up to where it was when he started, if not higher, “because we have healthier cows.”

- Milking time is down from 2 hours for 87 cows to as little as 1-1/2 hours for 120 cows.
- His rate for culling cows is 12 percent, down from the 40 percent range most dairy confinement operations suffer.
- In 1995, Rutter’s cows required no stored feed between April 25 and October 28, and 100 animals spent the entire winter of 1995-1996 outside. “They’re the best animals we’ve ever raised.”

One motivation for Rutter’s move to rotational grazing was an approaching need for a new mowing machine, at a cost of more than \$16,000. “Instead, we completely changed our harvesting system, spending up to \$25,000, and that includes our labor and the expense of minor modifications, adding acres, etc., for the first 2 years, and about \$9,000 cost-share money from USDA. That’s a small investment, I think, when you compare it to machinery, buildings, and the other costs of taking care of a herd of 200-plus dairy animals, not to mention that the cows are doing the mowing.”

Rutter believes this suggests new economic as well as environmental possibilities: “We were killing ourselves and still not making any money—treading water, so to speak,” he says, adding that American dairy farmers have spent thousands of dollars on remodeling barns, moving rails, changing space, improving ventilation, etc., supposedly to keep cows clean, dry, and comfy. “We’ve got to shift capital investment from buildings and machinery to cattle and land because those are the only two things that can produce income.”



# A Vision for the Next Century

*People in cities may forget the soil for as long as a hundred years, but mother nature's memory is long and she will not let them forget indefinitely. The soil is the mother of man, and if we forget her, life eventually weakens.*

— Henry A. Wallace  
Secretary of Agriculture, 1936



**A**merica's *Private Land, A Geography of Hope*

represents a vision for the 21st century...

- About the importance of private land resources to the well-being of all Americans;
- About the capacity of American farmers and ranchers to produce a bountiful supply of environmental benefits, just as they produce bountiful supplies of food, feed, and fiber crops;
- About the shared responsibility and local action needed to achieve effective land stewardship;
- About how NRCS speaks for the land and encourages land stewardship.

## **We in NRCS have a vision...**

*...that farmers, ranchers, and all other private landowners understand they have the care of the land in their hands.*

The United States is an expansive, diverse land. Much of that land is privately owned, and most private land is used for agricultural purposes. The health of the American land, therefore, is largely in the hands of those farmers and ranchers who daily make decisions about its use and management.

Our Nation long ago made a commitment to set aside its special places—national parks, forests, and wildlife refuges. We keep that commitment today. A matching commitment is needed to private land, but it is a commitment of a different nature. Instead of a national decision or edict, this must be a shared commitment to stewardship by millions of Americans. A healthy land can only be the sum of many small and local places that are themselves healthy.

The importance of the private land resource to our Nation's economic and environmental well-being was emphasized in the 1996 report of the bipartisan President's Council on Sustainable Development: "Private decisions on managing [private] lands have long determined the quality, vitality, and fate of natural resources and will continue to do so." In other words, the Nation will likely never achieve its goals for conservation and environmental quality if farmers, ranchers, and all other private landowners are not engaged in a cooperative effort to use land according to its capabilities.

NRCS is committed to helping the owners and managers of all private land understand and excel at land stewardship.

## **We in NRCS have a vision...**

*...that farms and ranches produce far more than grain and livestock.*

America's agricultural production is the envy of the world. Capturing the advantages of fertile soils and favorable climate, our farmers and ranchers produce a safe, affordable supply of food and feed grains, meat and dairy products, fruits and vegetables, and fiber crops. But our Nation's farms and ranches produce far more than these traditional commodities. Well-managed agricultural land also produces healthy soil, clean air and water, wildlife habitat, and pleasing landscapes, all of which are increasingly valued by rural and urban citizens alike.

This growing public interest in private land couples well with the strong and growing desire among landowners to meet their individual and community responsibilities to protect the





natural resources they hold in trust with society. That should make possible, as one farmer recently put it, “the elimination of policy and program barriers to the adoption of sustainable practices and rewarding responsible stewardship.”

NRCS is committed to helping the landowners succeed in producing agriculture’s environmental commodities, just as those landowners already succeed in producing food and fiber commodities.

## **We in NRCS have a vision...**

*...that local action—neighbors working together—is the most promising foundation for effective land stewardship.*

For the first time in the history of U.S. agricultural policy, the 1985 farm bill linked eligibility for Federal farm program benefits to land stewardship. The compliance policies—conservation compliance, sodbuster, and swampbuster—in that Act required that farmers practice a measure of soil conservation and wetlands protection in return for commodity price supports, farm loans, crop insurance, and other farm program benefits. Those policies, affirmed in the 1990 and 1996 farm bills and coupled with important cost-sharing programs, produced significant conservation gains over the past decade, but their quasi-regulatory nature also tended to drive individual conservation action toward a lowest common denominator. Some farmers did only what was necessary to comply and nothing more. Conservation achievement thus stopped short of what it could have been and should be if the Nation is to realize its dreams of a sustainable future.

The next increment in land stewardship will come about when rural and urban residents jointly accept the reality that everybody is somebody’s neighbor, that shared responsibility is the key. A search for consensus then becomes the foundation for effective land stewardship in communities and watersheds across the country. NRCS and its many partners, particularly state conservation agencies and local conservation districts, along with all the other USDA agencies, are in position to foster the discussion that must occur to achieve this consensus for action—consensus based on sound science, sensible economics, appropriate technology, and current information.





Grant Hellman Photography

The 1996 farm bill put in place a number of new and innovative conservation programs—voluntary, incentive-driven tools—that should prove especially useful in fostering both understanding and action on conservation problems at the local level. NRCS is committed to using both new and existing programs as conservation tools in concert rather than as independent programs. NRCS employees should be conservationists first and foremost, not simply program managers.

### **We in NRCS have a vision...**

*...that our agency will speak for the land.*

NRCS, formerly the Soil Conservation Service, was born of adversity, a national response to the Dust Bowl catastrophe of the mid-1930s. The agency's first chief, Hugh Hammond Bennett, spoke eloquently for the land when he convinced the Congress that soil erosion was a national menace; that a permanent agency was needed within the Department of Agriculture to call landowners' attention to their land stewardship opportunities and responsibilities; that a nationwide partnership of



Federal agencies with local communities was needed to help farmers and ranchers conserve their land.

Today, more than 6 decades later, the land–soil, water, air, plants, and animals–still requires someone to speak for its health and well-being, and that responsibility remains a challenge for NRCS, the Department’s lead conservation agency. Indeed, no other Federal agency speaks for the health and fate of America’s private land.

NRCS is committed to doing so by working with private landowners and managers to assess the state of their land and protect its values.

## We in NRCS have a vision...

*...that early in the next millennium our Nation will achieve an added measure of that state of harmony between people and land called conservation.*

In a 1939 speech titled “The Farmer as a Conservationist,” Aldo Leopold commented: “When the land does well for its owner and the owner does well by his land—when both end up better by reason of their partnership—then we have conservation. When one or the other grows poorer, either in substance, or in character, or in responsiveness to sun, wind, and rain, then we have something else, and it is something we do not like.”

Leopold continued: “Let’s admit at the outset that harmony between man and land, like harmony between neighbors, is an ideal—and one we shall never attain. Only glib and ignorant men, unable to feel the mighty currents of history, unable to see the incredible complexity of agriculture itself, can promise any early attainment of that ideal. But any man who respects himself and his land can try...”

As we move into the next millennium, our Nation must strive for a state of harmony. We can no longer be satisfied with slowing erosion, water pollution, and other forms of land degradation. Harmony will demand that we set our sights higher—to improve the land upon which our destiny rests by restoring those places that are damaged, by enhancing those places whose condition is merely adequate, and by protecting those areas that remain pristine.

Achieving the ideal may well prove impossible, but helping farmers, ranchers, and others try is the fundamental mission of NRCS. Only then will private land become an integral part of our Nation’s geography of hope.

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**“...today we understand that narrowly circumscribed areas of natural beauty and protected land alone cannot provide the quality of environment that people need and want. We must also recognize the needs of America’s private land and private landowners for us to truly have a geography of hope.”**

