

Information:

from the National Trust for Historic Preservation

Rural Conservation

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Every rural community is heir to a unique identity formed in part by people, in part by geography. Farming communities, river settlements and railroad and mining towns are expressions of the cultural traditions, livelihoods and ambitions of the people who created them. However, the rich diversity of America's countryside is threatened as rural historic, scenic, natural and agricultural resources are lost at an alarming rate.

Rural conservation is the protection of the countryside and includes the preservation of buildings and villages of cultural significance, the protection of their surroundings and the enhancement of the local economy and social institutions. In rural areas, historic resources are inseparable from their setting. The location, design and growth of farms, villages and other rural development generally were determined by the availability of natural resources: good soils and climate for agriculture, suitable water for consumption, transportation or power, and timber and minerals. The functional and harmonious relationship between early rural structures and settlements and their surroundings evolved over decades. To preserve this relationship, rural conservationists must concern themselves with the protection of farmland, forests, wetlands and wildlife habitat as well as cultural resources. The interdisciplinary nature of rural conservation also requires attention to local economic, political and social factors.

Key Concerns

During this century and the last, migration to the city has left many rural communities impoverished. Since the 1970s, however, rural communities have begun to experience a dramatic reversal of this trend: People are moving back to the country, and in large numbers. The 1980 Census showed that during the last decade America's rural population increased by 16 percent. One third of all Americans now live in rural areas. This unanticipated growth is catching many communities unprepared to deal with the changes—and opportunities—it brings. The key concerns facing rural communities include the following:

Rural Social and Economic Problems

Although some rural communities enjoy healthy econ-

omies, others cannot expect to attract new residents or keep their own young people unless they find new ways to approach such long-standing problems as inadequate employment opportunities, schools, public transportation and health care. Though often more hidden from view in rural areas than in cities, poverty is a serious problem: A greater percentage of rural residents than urban ones are poor.

The shortage of adequate, affordable housing is another major problem. Rural conservationists can help address this problem by assuring that where practical, older buildings contributing to the character of the community are rehabilitated rather than abandoned or demolished.

These problems present tremendous challenges to rural communities as a whole and for many rural conservation groups may be beyond their capacity for direct action. Rural conservation, however, can and should complement community development activities and efforts to alleviate poverty and housing needs.

Development Pressure on Natural Resources

Forests, wetlands, coastlines, prime agricultural lands, rangeland, free-flowing rivers, wildlife habitat and other natural resources are all under increasing pressure from development, extraction of minerals, overuse and pollution. In the West critical issues often



The harmonious relationship among the built, agricultural and natural environments in communities like Tunbridge, Vt., has high appeal and is the focus of many rural conservation efforts. (Vermont Travel Division)

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revolve around such questions as who has the rights to scarce water, how much cutting is allowed in national forests and how intensively publicly owned rangeland is used. Common midwestern issues are poor soil conservation practices and the clearing of vegetation along streams and fence rows that provides wildlife habitat, protection from erosion and visual interest to the landscape. In the East a key concern is likely to be housing development, which if inappropriately located can threaten erodible steep slopes, aquifers supplying community water, wetlands important to wildlife, prime farmland or ridgelines that are part of everyone's view.

Protecting the Agricultural Economy

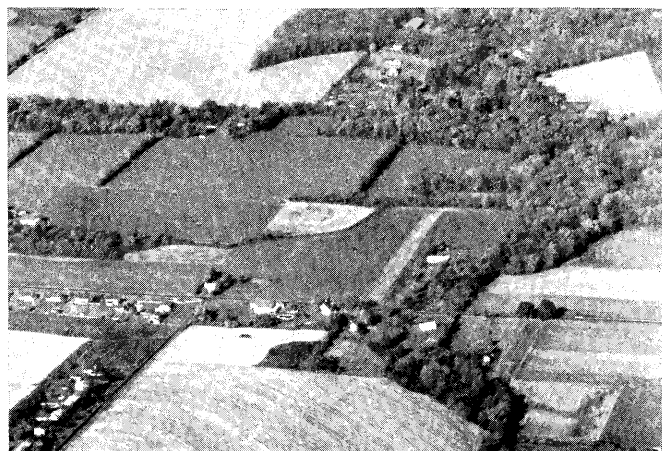
Agriculture is the predominant land use, economic activity and visual feature of much of the countryside. Farmland preservation is the key to many rural conservation efforts and involves more than saving range and cropland. It requires assuring the continued viability of the entire agricultural economy of an area, including farms, ranches, wholesalers, equipment suppliers, financial institutions and transportation networks. Unfortunately, the best farmland is often the land most suited for development. When circumstances such as urbanization or declining prices for agricultural products cause the price of land to exceed its value for agriculture or ranching, the owners are frequently tempted to sell. In addition to difficulties caused by these economic issues, farmers frequently find it difficult to farm near suburban developments. New residents object to the odors, early morning noises, sprays and other "inconveniences," while farmers object to crop and livestock damage caused by trespassers, pets and vandals. As farmers become discouraged and sell out, the overall result is to cause the total acreage devoted to agriculture in an area to fall below that needed to keep the agricultural economy healthy.

The Town and the Village

Just as farms and ranches need protection, so do the towns and villages that are the economic, cultural and political centers of life in rural America. The key to protecting a rural town or village is to identify its role in community life and to assure that that role continues to be a viable one.

The town is the community's central meeting place where schools, doctors, theaters, farm equipment dealers and wholesalers are located. It may also be the county seat, the regional center for shopping or the location of the cattle auction, grain elevator, industry or college. Economically healthy towns that can keep their downtown businesses and residential neighborhoods viable have less sprawl that encroaches on the surrounding countryside. Rural conservationists should therefore work with those concerned with the economic viability of the town. Fortunately, the protection of small towns is receiving increased attention from those concerned with rural development and historic preservation.

The village or crossroads community may be the location for the church, the elementary school, the post office, the general store, the gas station, the diner or the Grange. While its services are very important to



Houses strung out along roads in agricultural areas create problems for farmers, visual blight and increased costs of services to homeowners. (Samuel N. Stokes)

many rural residents, they are often uneconomical. Fewer solutions have been proposed for the preservation of very small settlements.

Retaining Cultural Resources

Rural historic preservation should encompass the whole range of rural structures, including barns, springhouses, corn cribs, silos, windmills, water mills, bridges, fences, corrals, one-room schoolhouses and general stores. Even early gas stations and diners, though more recently part of the American scene, are part of our heritage. In addition, rural historic preservation should encompass man's impact on the land, from dirt roads, canals, irrigation systems, field patterns and Osage orange hedgerows to settlers' trails across the West, railroad rights-of-way, Eskimo fishing camps and the archeological remains of Indian settlements.

The causes of the gradual disappearance of rural cultural resources include abandonment, lack of economic viability, neglect, vandalism, new development and changes in agricultural technology. Farm buildings and fences may no longer be needed for current agricultural practices. Indeed, they may be in the way or a financial liability if taxed. Many farm houses are abandoned by their owners for new adjacent houses or mobile homes, deemed more energy efficient or convenient. It is usually difficult to find new uses for such structures as barns, silos and corn cribs when they are no longer needed for their original purposes. Rural conservationists may, however, be able to assist property owners in stabilizing and keeping the roofs repaired on the most important of these structures.

Design

In working for the protection of rural cultural resources, rural conservationists also need to be concerned with the siting and design of new buildings. New structures should be designed in such a way as to complement older buildings and the landscape. Location along ridge lines and at other highly visible sites that will mar views should be avoided, and in most cases new construction should be clustered so as to protect as much land as possible. Fortunately, vegeta-

tion and topography can be used to hide much new development.

Lack of Planning and Assistance

The twin problems of attracting appropriate, well-designed development and protecting what makes a community special leave many rural leaders groping for answers. Although most communities have the power, few have such tools as up-to-date zoning ordinances or design guidelines in effect to protect existing historic, natural and agricultural resources and accommodate compatible growth.

There is an array of private and governmental programs to aid all rural communities. But programs providing funds and technical assistance are limited. Moreover, many communities lack the necessary knowledge and organizing experience to use existing legislation, technical assistance or funding programs to their greatest advantage. To compound this problem, few individuals and nonprofit groups are knowledgeable about useful private techniques—such as easements and revolving funds—that can complement government action or be undertaken independently.

Although the problems are complex, rural conservationists have numerous opportunities to make a difference in their communities. Rural conservationists must rely on a variety of techniques, some governmental and some private, which, used together, can achieve protection. The following sections outline the steps that private nonprofit organizations and local governments can take to achieve rural conservation.

Organizing

Individuals organize for rural conservation for a variety of reasons and in a variety of ways. Some are primarily interested in natural areas protection; others want to save farmland or historic buildings; a few begin with a concern for the total rural environment. Some may already be associated with a nonprofit group or serve on a local government board; others may have to start from the beginning by building an organization or political support to achieve their goals. No matter how the effort is begun, it is important to realize that the most vital resource involved is *people*. Volunteers are often the heartbeat of a rural conservation effort; also, in a rural community where there are relatively few people to educate and organize—and an equally small number to do all the work—even just a few people can sometimes achieve impressive results.

A first step in organizing is to consider the appropriate vehicle. Is the local government sympathetic? Perhaps an interested planning commission would support the formation of a study group or special task force and ask the elected governing board to appoint its members and provide modest support. Is there an existing private nonprofit organization whose aims are compatible with rural conservation? Perhaps a local historical society, nature center, farmers' association or

civic club would adopt a rural conservation project or establish a rural conservation committee. Where two such groups are interested, perhaps they could work in tandem. Where none exists, perhaps a private, nonprofit group can be formed.

The nature of the need in a particular community will determine the best approach. A basic decision is whether the primary vehicle will be local government or a private, nonprofit group. Government can appropriate funds or apply for certain grants; its decisions carry the force of law; and its approval can give a rural conservation effort immediate legitimacy in the eyes of the community. However, private nonprofit organizations can often act more swiftly than government in protecting endangered resources or properties and may be more trusted by property owners concerned about higher taxes or government interference. A nonprofit can pick and choose among many issues—some perhaps too controversial for government—and can act where government may be remote, as in an unincorporated village. Plus, a nonprofit may do a better or more creative job of public education and soliciting charitable contributions. Whether government or a nonprofit group is chosen as a focus, rural conservation organizers should not lose sight of the advantages of the other; a dual public/private approach is often the best course of action.

A companion concern in organizing for rural conservation is to identify the region of concern: Is it a watershed? a township? a county? a valley? a village and its environs? This can also have a bearing on whether a governmental or nonprofit approach would work best, since some regions might encompass more than one governmental jurisdiction. For example, the Chester-Sassafras Foundation, a private, nonprofit group based in Kent County, Md., decided that the opposite shores of the two rivers bordering the county to the south and north were important to its efforts, and named itself accordingly.

It is important to be clear about the reasons for undertaking a rural conservation effort. A single crit-



Community leaders in Oley, Pa., worked to protect the historic character of the village of Oley as well as the resources of the surrounding township. (Oley Resource Conservation Project)

ical issue may call for swift, concerted action, but at the same time it may only be a symptom of an underlying, larger problem. Is a proposed shopping mall really the problem, or is it the need for well-thought-out guidelines for appropriate development? Are there still more issues not yet receiving adequate attention?

For long-term effectiveness, however, rural conservationists need not only to identify all issues of concern in their community but also to articulate broad goals, develop measurable objectives and create a plan of action. For example, if the issue is "Our local merchants and a historic, beautiful, productive farm on the edge of town are threatened by a proposed shopping mall," then it might first be necessary to seek to halt its construction or, as a compromise, to control some of its effects, such as traffic and visual blight. But the larger problem may call for long-range goals, such as "Protect the scenery that makes our community special." An objective for this goal could then be "Protect three key properties on the perimeter of the village in the next two years." A plan of action would be to identify the properties to be protected, determine the techniques required to achieve that protection and put those techniques into place. Such techniques could include establishing an easement program or passing a new zoning ordinance. In this way it is possible to be both idealistic (save our scenery) and realistic (which scenery and how?).

Beyond having goals, objectives and a plan of action, a rural conservation program needs leaders and followers, money and community support, and knowledge and good advice. Whether a nonprofit organization or a local government committee, a rural conservation group has to develop particular skills: how to raise funds and spend them effectively; how to obtain and use professional assistance; how to build community support through education and public relations efforts; how to work with volunteers and communicate with members; how to be effective politically. A number of publications suggested in the bibliography of this Information Sheet can point the way toward acquiring these skills. Potential sources of professional advice



A major concern of the Cazenovia Community Resources Project was the protection of the township's scenic countryside. Citizens were asked to identify favorite scenes such as this agricultural landscape. (Samuel N. Stokes)

are the county offices of the Soil Conservation Service and the Cooperative Extension Service, the county or regional planning agency, state departments of natural resources or community development, the state historic preservation office, universities and consultants.

Obviously, in any rural conservation program, funding is a key concern. Communitywide public relations events work especially well in promoting an organization's goals and helping to raise funds. For example, in Oley, Pa., concerned residents were able to establish the Oley Valley Heritage Association through a "heritage festival" patterned after the valley's successful agricultural fair. Even without the boost of a special event, raising funds in a rural community may not be as difficult as people might first assume. Small donations from local businesses, associations and individuals add up; grants from public funding sources or local foundations may also be possible.

Gathering Information

Identifying a community's resources and finding out as much as possible about the local government, population and environment are as important as organizing. An emergency, uninformed appeal for support may sometimes be successful in initiating a conservation effort in a crisis; but to sustain a long-term effort, solicit funds, influence legislation or support a case in court, much information is required. In addition, gathering basic information about a community helps a group to refine its objectives and plan of action and to gain confidence through acquiring its own knowledge and making visible progress. Many communities collect information on a comprehensive, continuing basis. Others may have an urgent need for specific information or possess limited resources that enable them to concentrate only on one or two particular concerns—such as a historic survey or wetlands identification.

What kinds of information should be collected? Facts and figures about demographics, the local economy, the school system, transportation, health care and housing can be useful in building an overall picture of the community and selecting particular issues to pursue. Also helpful is information about the local government—its form, its officials, its regulations—and other government bodies directly affecting the community, such as water and sewer authorities, school boards and county and state agencies. The centerpiece of a rural conservation effort, however, is the environmental resources inventory, or ERI. The ERI identifies the community's significant land-based resources and any existing or potential threats to those resources.

Fortunately, there are good sources for most of this information. The U.S. Geological Survey, planning agencies, community economic development authorities and state departments of natural resources or community development can often provide maps, facts and figures. The Soil Conservation Service can provide mapped information not only on soils but on other natural characteristics of the land as well. Nearby uni-

versities may have done studies. A local library may be able to provide helpful references or local sources. If an environmental impact statement has ever been prepared for a local project funded or licensed by the federal government (or sometimes the state), it may contain pertinent information. Local boards of health, watershed associations and sewer authorities are other potential sources. Knowledgeable residents, such as a local hunter or a retired farmer, may provide useful information. Even unexpected sources can yield helpful information, such as old documents in an attic trunk. Other more specific sources are noted below.

The Environmental Resources Inventory (ERI)

An ERI provides a rational, objective basis for selecting the environmental issues that are most critical to pursue. The first step for an ERI is to identify goals for its use. These might include educating the public about the area's resources, identifying particular properties requiring special protection, enacting local protective ordinances, evaluating proposed new development or identifying agricultural or historic districts for federal or state protection programs.

An ERI is documented primarily through maps, often accompanied by written reports. Maps are developed from any existing information—for example, from soils data available from the Soil Conservation Service—combined with or verified by investigation in the field. An ERI is a labor-intensive effort but one that can make good use of volunteers. While it is necessary to have professional advisers or consultants overseeing the ERI to ensure accuracy and credibility, well-trained volunteers can search out existing publications and public documents, interview knowledgeable residents, perform fieldwork, including photography, and help prepare maps. Much of the information needed may already be mapped, although it may be necessary to adjust these maps so that they are all on the same scale.

Categories in the ERI include the following:

Topography and slope: Topography is often included on the base map of the ERI, the map on which all other information is compiled. Topography, the elevation and formation of the land (hills and valleys, for instance), is shown by contour lines, the wavy lines familiar to anyone who has seen a U.S. Geological Survey quadrangle map, or "quad sheet," available for nearly all areas of the United States. Slope—the measurement of the degree of steepness of land—is derived from topographic information. It is particularly important since such land uses as housing development should be avoided on steeper slopes because of their greater erodibility and consequent effects on water quality and flooding.

Geology: Since bedrock composition and geological processes are responsible for a community's terrain, soil composition and water resources, a geological inventory will yield information about a community's topography, soils and water. In addition, a geological inventory can provide information about the

possibility of faulting, earthquakes or landslides or the availability of commercial mineral deposits.

Water resources: What are the sources of water in the community, above and below ground? How clean are they? Are there threats to quantity and quality? Floodplains and flood hazard areas are generally included in this category, as their locations are important to consider in making decisions on siting development. In addition to the sources mentioned above, the National Flood Insurance Program under the U.S. Department of Housing and Urban Development is a source of information.

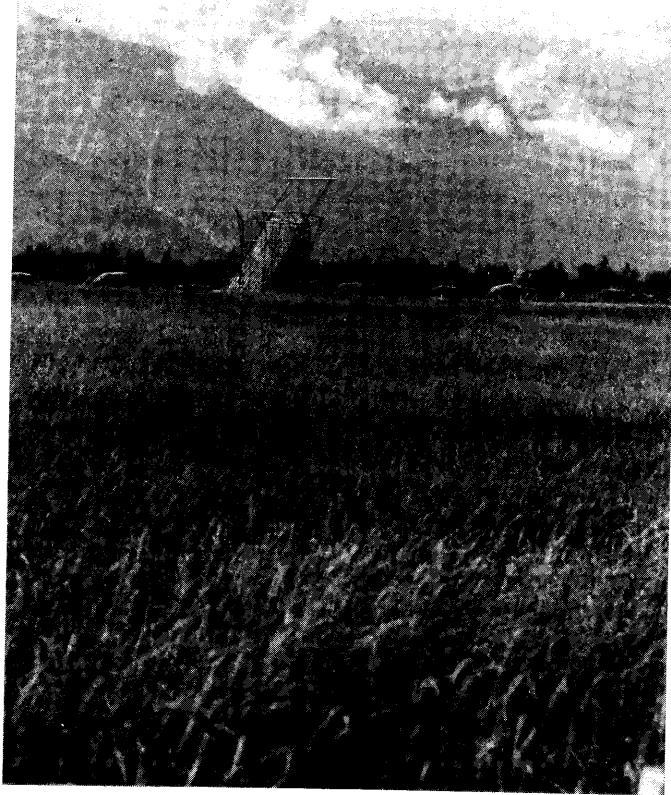
Soils: Soils information provides information about the agricultural capacity of a community's soils. It also can pinpoint areas suitable for development—where the soils are well drained, capable of supporting foundations and suitable for septic tanks. The Soil Conservation Service has compiled this information for nearly every county in the United States.

Vegetation: Vegetation can improve air quality, control erosion and provide food and cover for wildlife; is often a source of income as food or fiber; and is a key element in the appearance of a community. Vegetation can be inventoried at varying levels of sophistication. The most basic is the structural system: forest, tundra, meadow, orchard, cropland and pasture are typical categories. More sophisticated would be to map plant "association" or groups of plants typically found together in a particular environment. The oak-hickory or spruce-fir associations of many eastern forests would be examples. The relative abundance of important species and their degree of maturity can be noted, as well as the presence of rare or endangered species and historic plant materials such as old orchards or elms and maples planted as village shade trees. Sources of information are botanists and ecologists connected with area educational institutions, and aerial photographs, both historic and current, often available from the Soil Conservation Service.

Wildlife: Wildlife is a highly valued resource in most rural communities. Amateur naturalists, hunters and fishermen can help collect data on the species in the area. Habitat for important game and rare or endangered species can easily be mapped with the assistance of area ecologists or wildlife biologists associated with educational institutions or state fish and game agencies. Mapped information on plant associations can help identify the habitat of wildlife preferring those associations.

Land use: It is helpful to know how land in a rural community is used—from crops, orchards and pasture to fallow fields, from residential and commercial areas to specific uses such as schools, utility lines or parks. Aerial photographs and on-the-ground inspection can identify land use. Comparing this information with current zoning maps and tax maps, which show land ownership, can show where development is expected and encouraged and who might be affected.

Agricultural land: The Soil Conservation Service has begun compiling special maps that show prime farmland, farmland of statewide or local importance



This movable wood "beaver tail" used to build "bread loaves" of hay is offset by the Tetons. The Jackson Hole Land Trust is collecting easements to protect the valley. (Samuel N. Stokes)

and unique farmland (such as for orchards or vineyards). This information helps to identify viable farming areas in the community—particularly if combined with the Soil Conservation Service's Land Evaluation and Site Analysis (LESA) procedure. A valuable map a community should compile through fieldwork and local documentation is one showing leased farmland, as a large amount of leased land could indicate instability of the farming community, or places where there is a greater potential for poor soil and water conservation practices.

Cultural resources: Architectural, historic and archaeological resources are amenities that contribute to our knowledge and appreciation of the past and that can be used to stimulate appropriate economic development or provide needed housing. Cultural resources should be included in any comprehensive ERI, although many ERIs have overlooked this important category. The organization should discuss its plans for a cultural resources survey with the state historic preservation officer (SHPO), appointed by the governor, whose staff can provide technical assistance for the survey and ensure that the data collected can be inte-

grated into the statewide cultural resources survey. The SHPO may also be able to provide financial assistance or point to earlier surveys that can help the group get started.

All built features should be included in the survey. Outbuildings—even small structures such as smokehouses and pigpens—millraces, hedgerows, limekilns and other landscape features should be documented. In addition to its architecture, each building's environmental setting should be described and photographed. Relationships of various structures (a mill to its millrace and dam, for example) should be mapped, photographed and described. Larger relationships should be examined, including road systems, settlement patterns and field patterns. Boundary demarcations that distinguish and define smaller segments of the landscape, such as fences, walls, ditches, hedgerows or forest edges, should be described. Finally, particular attention should be given to archeological resources, both historic and prehistoric.

Scenic resources: Like cultural resources, scenic resources are an often neglected category of the ERI. Scenic resources such as panoramic vistas or scenic roads are valued amenities many rural communities take for granted. These resources contribute to quality of life and tourism, a potentially important rural economic activity. In assessing scenic resources, both professionals and residents can be involved. Often a professional experienced in landscape assessment (usually a landscape architect) categorizes landscape types, establishes criteria for evaluating their significance and surveys and maps the land area. Residents can be involved in evaluating landscapes, generally through sorting photographs taken from within or outside the community into categories ranging from "most pleasing" to "least pleasing." The residents' evaluation gives a professional local preferences as standards for assessing the community's landscapes. The sorting of the photographs, called a "Q-sort," or quality sort, is often set up through random polling methods and is analyzed statistically. Interestingly, such surveys have revealed that what have been com-



Farms in Iowa need fewer structures than they once did. The barns and windmills that were characteristic of the agricultural landscape are rapidly disappearing. (J. Timothy Keller)

monly regarded as subjective perceptions of landscape beauty are found over and over again in widely varied populations. Thus, it is possible to render an objective judgment about what is scenic in the community.

It is also possible to survey scenic resources simply by asking individuals or community groups to identify on a map of the community those sites, corridors or vistas they most enjoy. Citizens in Cazenovia, N.Y., used this technique, asking residents to mark on maps those places they considered most scenic. A landscape architect compiled and mapped results of the survey. For especially scenic vistas or corridors, it is possible to map "viewsheds": everything that can be seen from a given point or series of points. Viewshed maps can be used to guide decisions on the siting of new structures and on allowing the removal of vegetation.

Analyzing the Information

Most information described above can be recorded in map form. If all information is compiled on maps of the same scale, it becomes possible to compare information in one category with another. This process becomes even easier if the final maps are made on a clear plastic material (known as mylar) so that they can be overlaid on one another on top of a single base map. In some communities where special computer graphics capabilities exist it may be possible to enter information gathered for the ERI into a computer. The computerized information can then be analyzed in any number of combinations and each combination printed out as a different map. Analysis of ERI maps can highlight those areas where several resources exist together, and thus, where it would be most important to avoid new development—for example, where productive farmland, historic farmsteads and floodplains coincide. Similarly, analysis of the maps can suggest where compatible new development could be sited. The reports accompanying the maps can describe the inventory process and sources of information and note the significance of community resources and potential threats to them.

A word on accuracy: It is the nature of environmental resources that some can be mapped accurately (such as historic resources) and others cannot (such as soils, which often grade from one type to another). For this reason, communities should rely on inventory maps only to help them flag potential sources of concern when considering proposals for development. Any development proposal should present additional current, accurate, detailed, site-specific information in the appropriate categories of the ERI.

Once a group has collected and evaluated information about the community, the next step is to work for the protection of the community's particular resources, character and economy. Below, we discuss ideas for local regulations and incentives affecting development and land use. It is important to bear in mind that no single technique will meet all of a community's

needs. The best approach is to use techniques that complement one another, not only government regulations at the local, state and federal levels, but also private techniques described in a later section.

Local Government Controls

Planning

Many rural residents have traditionally been skeptical of planning and land-use regulation, viewing these activities more as an infringement on citizens' rights to independent individual land-use decisions than as a democratic process for resolving land-use conflicts and guiding community development over the long term for the benefit of all. Also, some plans for rural communities have been based on model comprehensive plans for urban areas, where land uses and assumptions about development are very different from those in rural areas. This problem is made worse if the plans are constructed by consultants who enlist little local commitment or understanding to ensure implementation once they depart. For these reasons, planning is too often regarded as an empty exercise. The fact is, though, while it may have no official plan or planning department, a local government is involved in planning every time it makes next year's budget, authorizes the construction of a sewer system or decides to widen a road. To guide such decisions more consistently, many incorporated towns and rural counties are developing comprehensive plans.

A comprehensive plan is the blueprint for a community's future. The plan is usually the foundation of any land protection and development regulations a community may enact; it may also cover housing, health, transportation and economic issues. In general, it should describe the current situation in the community, set forth policies that should guide future decisions and recommend particular actions that are warranted at the time the plan is written. A comprehensive plan should be consulted regularly by local officials and updated periodically to account for new information and events.

Zoning

Zoning is the regulatory backbone for land-use planning. It is a legal mechanism used to achieve orderly and appropriate land-use relationships through the regulation of private property. Zoning has been sanctioned by the courts for the purpose of conserving and promoting the health, safety and general welfare of the community. Through zoning, land under a local government's jurisdiction is divided into districts or zones. Within those zones, the use of land and buildings, including population density and the height, placement and dimensions of buildings, is regulated. Typically, uses are categorized as residential, commercial, industrial, agricultural and open space.

Zoning traditionally prescribes minimum lot sizes for development. The larger the minimum lot size, the fewer buildings there will be in a given zone. However, large lot zoning, even with 10- or 20-acre minimum lot

sizes, does not necessarily protect the countryside or ensure an open appearance. Indeed, it may simply cause more land than is actually needed to be used to meet demands for development in the community. In forested areas, it can hamper good forest management practices, which require much larger, contiguous forest properties. Large lot zoning has often been struck down by the courts as "exclusionary"—that is, drawn not to protect certain resources, but to keep out development or low-income residents. It has been used successfully, however, to protect farmland. If the smallest size for an economically viable farm is, for example, 160 acres, minimum lots of this size in agricultural areas may be justified.

A zoning ordinance generally has two parts: (1) a written text that explains the zoning requirements and (2) a map showing the location and boundaries of each zoning category. The zoning ordinance is usually proposed by the planning commission or board, adopted by the elected governing body, and administered by the planning commission with the help of a zoning administrator. It is important to bear in mind that even after a good zoning ordinance is put in place, it can be weakened by amendments, variances and violations, or even changed altogether if new officials are elected.

Subdivision

Whereas zoning governs the use of property, a subdivision ordinance controls what the development for that use will look like and how it will affect the rest of the community. A subdivision ordinance sets standards for the division of larger parcels of land into smaller parcels. It is often coordinated with the zoning ordinance, and indeed, a few communities have combined their zoning and subdivision controls into a single land development code. Medford, N.J., has developed such a code.

A subdivision ordinance defines procedures for filing applications and obtaining approvals, design standards and provisions for general administration. The ordinance may exempt a minor subdivision of a limited number of lots—usually from one to five—from the full approval process. It is a good idea, however, for a locality to retain some degree of control even over the subdivision of one lot to ensure that certain standards are met. The ordinance is proposed, adopted and administered in the same fashion as the zoning ordinance.

Two of the most important parts of a subdivision ordinance are its design and engineering standards and its provision for performance guarantees. In general, the ordinance's design and engineering standards cover the way a property is to be divided into smaller parcels, plus access, grading, landscaping and vegetation removal, common areas, drainage, utilities, paving and other improvements such as street trees, lighting and sidewalks. The performance guarantee, such as an escrow account, is a means of ensuring that development will take place only as approved.

Typically, developers provide a preliminary plan of the subdivision in map form for review by the planning commission. At that time, information about resources

on the site is given, in greater detail and accuracy and at a larger scale than provided by the community's ERI maps. Given preliminary approval, developers then create more detailed plans for further discussion.

Variations on Standard Zoning and Subdivision Ordinances

Overlay zoning: One of zoning's weaknesses is that it cannot be applied to single properties, in what has been called "spot zoning." Like exclusionary zoning, spot zoning has been outlawed by the courts, since it violates the principle of equal treatment under the law. What is to be done, then, for those special properties or resources occurring singly throughout the community, such as wetlands and historic properties? Overlay zoning is the answer. It calls for certain regulations to be applied uniformly to all properties meeting a certain description, regardless of their location or zone, or proximity to one another, in addition to the regulations that already apply within the zone. The term "overlay" is used because a map of the zoning would require an additional, or overlay, map showing the sites affected by any special regulations.

Performance zoning: Zoning was originally conceived to separate different uses deemed incompatible. Performance zoning is a more flexible system that allows for mixed uses but regulates the impacts of land uses and development on the physical, social, economic and environmental conditions of a community through setting performance standards. Such a system allows a community to know in advance exactly what and where a new development will be and what its effects will be. Generally, performance zoning is operated with a scoring system. Each application must receive a passing score to qualify for a permit, but often some standards stand alone and must be met regardless of the overall score (such as water quality standards).

Standards can be set for air and water quality, glare, noise, traffic generation, visual impact, vegetation removal, amount of impervious surface and numerous other criteria, but they typically ignore use, location and density. Places as widely varied as the Town of Groton, Mass., Bucks County, Pa., Hardin County, Ky. (which calls it "unzoning"), Issaquah, Wash., and Bay City, Ore., have instituted performance zoning systems.

Clustering: One of the major impacts of standard zoning and subdivision ordinances has been to create sprawling development, often unnecessarily affecting natural, agricultural, scenic and other resources. Clustering often appeals to developers because it allows flexibility in lot size and can be less expensive in terms of overall improvements such as roads. Clustering works this way: A 100-acre tract under existing ordinances can be divided into 50 single-family house lots. With an ordinance allowing clustering as an option, the developer would be able to maintain the same density of 50 families but would offer smaller lots and permanently reserve the remaining land as open space or agricultural land. Some communities consider clustering such a good idea that they are willing to provide a

"density bonus" (in the above example, perhaps 10 more houses could be built) to encourage developers to use clustering.

Preservation ordinances: One method of controlling inappropriate changes to historic and architectural resources is to enact a preservation ordinance. Such an ordinance can provide both for the designation of individual properties as landmarks and of whole groups of properties as historic districts—in effect, a type of overlay zoning. New construction, demolition permits and proposed alterations to landmarks and historic resources within districts should all be subject to approval, typically by an architectural review board or historic district commission.

Although there are few historic preservation ordinances in completely rural areas, one effective example exists in Loudoun County, Va. A countywide ordinance provides for the designation of landmarks and districts, including a provision for "historic and cultural conservation districts." This provision led to the establishment of the 10,000-acre Goose Creek Historic and Cultural Conservation District in 1977. The county's historic district review committee is empowered not only to review demolition permits and proposed alterations to existing buildings, but also to consider "the relationship of the size, design and siting of any new or reconstructed structure to the landscape of the district."

Federal and State Programs

A wide variety of federal and state environmental laws and regulations and financial and technical assistance programs affect rural communities, concerning issues from rural development and housing to protecting rivers and farmland. These laws generally control federal or state government activities that affect a community's environment or provide incentives (in the form of grants or technical aid) for local undertakings. These laws are best used in conjunction with local government controls, since most land use decisions are made at the local level. Some of the key laws are described below.

Environmental Review

The cornerstone of our nation's federal program of environmental protection and management is the National Environmental Policy Act of 1969 (NEPA), which requires that "major federal actions significantly affecting the quality of the human environment" go through a review process involving the preparation of an environmental impact statement (EIS).

The EIS process is intended to ensure that environmental information is available to public officials and citizens before decisions are made. At each step of the way, agency information and decisions must be made public and the public must be afforded an opportunity to comment. When a federal agency decides on an action, it must make the action known in a public document that (1) states that the EIS was considered, and (2) summarizes the measures adopted to mitigate environmental damage that will result from the action,



Ghost towns are a rural conservation focus in the West. Ban-nack, Mont., was the location of a major gold strike and the first territorial capital. It is now a state park. (Samuel N. Stokes)

or (3) gives the agency's reasons for not adopting such measures. The agency does not have to pursue an environmentally sound action—only consider the environmental impact of its action. Many states have also adopted environmental review as a policy for state government actions.

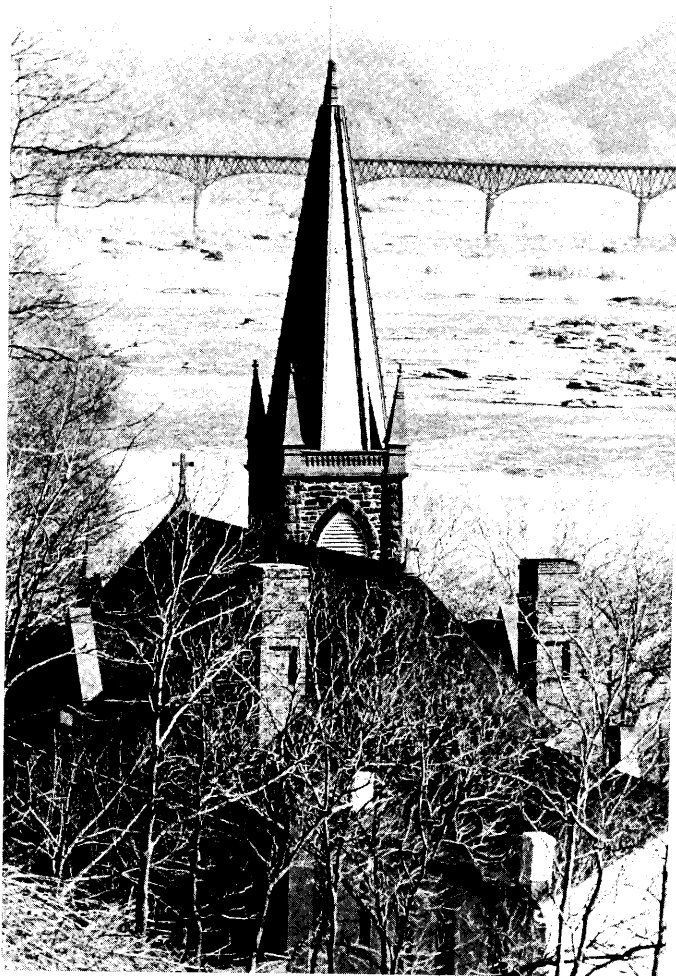
National Register of Historic Places

The National Register of Historic Places, established by the National Historic Preservation Act of 1966, is the official list of the nation's cultural resources worthy of preservation. Listing in the National Register provides protection by requiring comment from the federal Advisory Council on Historic Preservation on the effect of federally assisted or licensed projects on listed properties; and makes owners who rehabilitate income-producing certified historic structures eligible for federal tax benefits. The National Register is administered by the National Park Service in the U.S. Department of the Interior and is implemented in each state by the state historic preservation officer (SHPO). The SHPO is the point of contact for preservationists seeking information on the National Register.

Listing in the National Register is a key step in the protection of a rural site or area. Although the Advisory Council cannot require compliance, federal agencies generally work with it to ensure that their plans take preservation concerns into account.

Properties can be listed in the National Register individually or as part of a historic district. Concentrated groupings of historic properties should be nominated as historic districts, thereby affording protection from adverse federal impact to the entire area. Whenever justified, open space traditionally associated with a property or district being nominated to the Register should be included in the nomination in order to ensure adequate protection of the property's setting. Oley Township, some 20 square miles of Pennsylvania countryside, is listed in its entirety in the National Register.

Many states have also adopted state registers of historic places, administered in tandem with the Na-



The Shenandoah River and bluffs are a dramatic backdrop to Harpers Ferry, W. Va. Much of the surrounding countryside is either owned by the National Park Service or under easement. (James Q. Reber, from the book Harpers Ferry, 1975)

tional Register. Some afford environmental review of state actions affecting listed resources.

Land-Use Planning

There is no comprehensive land-use planning statute at the federal level. However, the states have enacted a variety of laws that affect land use. For example, most states have health regulations governing the siting of sewers and dumps. A few states have enacted land-use laws that go so far as to control what individual property owners can do to their land. The 1970 Vermont Land Use and Development Law (Act 250), for example, established a permit process requiring that most proposed development be reviewed by a district environmental commission appointed by the governor. The commission must establish that the proposed project "will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites or rare and irreplaceable natural areas." Vermont has also enacted a capital gains tax on the proceeds from sales of land held less than six years to discourage speculation and attendant inflation of land values.

Some states regulate critical areas such as wetlands. In 1957 Massachusetts enacted legislation to allow cities and towns to create conservation commissions, which first merely advised on the protection of natural areas. Subsequent legislation gave them power to regulate development of wetlands, authority to protect natural areas through purchase and receipt of land donations and responsibility to preserve prime farmland through purchase of development rights.

Other Programs

Water: Several federal statutes are concerned with the protection of both surface water and ground water. The Federal Water Pollution Control Act of 1972 funds construction of local water systems and sewage treatment plants. However, in practice the act also has created an incentive for development in some communities through regulations that have encouraged development of water and sewage capacity for more than the existing population. Several states have developed their own water protection statutes.

Floodplains: The National Flood Insurance Act of 1968 makes subsidized flood insurance available to property owners in communities that have established land-use controls in areas within 100-year floodplains (i.e., areas that on the average will be flooded once every 100 years). Many states further limit construction on floodplains.

Coastal zones: Through the 1972 Coastal Zone Management Act federal funds are provided to the states for the development and implementation of comprehensive management plans and controls on coastal development, both onshore and offshore. Controls may include provisions for protecting cultural resources as well as natural ones. Funding is also available for planning new development that is consistent with protecting coastal resources.

Farmland: The Farmland Protection Policy Act of 1981 requires that federal agencies identify and take into account the adverse effects that their programs have on farmland. Many states have established programs to protect farmland as well. In 1971, for example, New York State enacted legislation that allows groups of farmers voluntarily to form agricultural districts with local government approval and in compliance with the local comprehensive plan. More than half of the state's prime farmland is now included in agricultural districts. State agricultural district provisions can include: (1) requiring large lot zoning; (2) limiting nonfarm-related government-financed construction, such as road widening, sewage treatment plants and water mains; (3) facilitating purchase or transfer of development rights; and (4) assessing real estate used for agriculture at its use value rather than its market value.

Mining: The Surface Mining Control and Reclamation Act of 1977 requires states to establish a planning process to identify areas that may be unsuitable for surface mining and to establish a regulatory process for granting mining permits. The act also established the Abandoned Mine Reclamation Fund to which coal mine operators must contribute.

Endangered species: The 1973 Rare and Endangered Species Conservation Act requires that federal agencies ensure that their actions do not threaten the existence of a listed species or adversely affect its critical habitat.

Rivers: The National Wild and Scenic Rivers Act of 1968 provides for federal designation of rivers that meet certain criteria. Federally funded dams, canals, channelization and other water projects are prohibited on designated rivers and the government acquires rights along the rivers to protect them further. In order to be considered for designation by act of Congress, the river segment should be at least 25 miles long and free flowing and possess in its immediate environment outstanding scenic, natural, historical, cultural or related value. A designated river is placed in one of three classes (wild, scenic or recreational) and managed according to guidelines set up for its class. More than half the states have developed scenic river protection programs patterned after the national system. These programs provide protection through state acquisition of land or easements, zoning and the prohibition of state dam and water projects.

Roads: Billboards and road improvements can adversely affect cultural, natural and scenic resources. To prevent this, the 1965 Highway Beautification Act limited billboards and junkyards along federally funded highways and provided funds to the states to help pay for the removal of any that were there. Several states have enacted controls over billboards on state highways to conform to the federal regulations. Some states have also enacted programs for designating scenic roads to protect their visual qualities and control development adjacent to them. Scenic roads in New Hampshire are designated at town meetings, and proposed upgrading of designated public roads involving the removal of trees or stone walls must be presented at public hearings and receive written permission from the town planning board before any work is undertaken.

Trails: The 1968 National Scenic Trails System Act established standards and procedures for designating national scenic and recreation trails. National scenic trails are authorized and designated only by acts of Congress. Provisions must be made for the conservation of significant scenic, historical, natural or cultural qualities of the areas in which the trails are located. The Appalachian Trail and the Pacific Crest Trail were designated as the initial components of the scenic trails system. Information on this program is available from the state outdoor recreation liaison officer, appointed by the governor. Some states have passed legislation for designating and protecting scenic trails.

Rural Conservation through Agreements with Property Owners

In some cases, property to be protected should be acquired by the public. Some communities need additional parkland for public recreation; in other cases, a tract may be of such outstanding ecological importance that it can be adequately protected only through



Wagons traveling the Oregon Trail near Guernsey, Wyo., left deep ruts in the sandstone. Trail remnants, many of which are on public lands, present a major preservation opportunity in the West. (Samuel N. Stokes)

public ownership and management. Acquiring property, however, whether by purchase or through donation, is an expensive way to protect it. The costs are not limited to acquisition but also include the perpetual stewardship of land and buildings.

Both government and nonprofit organizations can undertake to protect land through real estate techniques ranging from acquisition of a property or partial property interests to encouraging simple agreements by property owners to observe good stewardship. Each technique varies in terms of the cost of protection effectiveness, duration and speed with which it can be implemented.

A private, nonprofit group that engages in one or more of these techniques is often called a "land trust." Significant potential exists for a land trust to cooperate with local government—through buying land for later conveyance to government ownership, for example, or by coordinating its easement program with local ordinances. In Jackson County, Wyo., developers get a density bonus by clustering housing in new developments and protecting the remaining open space. In addition to accepting conventional easements, the

Jackson Hole Land Trust cooperates with the county government by receiving and enforcing easements on the land developers agree to dedicate to open space, where the land trust's criteria are met.

Strategies for Protecting Properties Owned by Others

Notification and recognition programs: A very basic protection technique is to notify property owners that they possess a significant cultural, scenic, historic or natural resource. Although it does not guarantee protection, such a notification program does make landowners aware that they own something worth protecting. More resources are destroyed or damaged through ignorance and neglect than through deliberate action. A recognition program takes this idea one step further by announcing publicly that a property is significant. The Berks County Conservancy, a nonprofit group based in Reading, Pa., has used this idea to establish a program recognizing historic buildings in the county, whose owners may apply and pay for a cast-iron plaque in the shape of the county to be affixed to their homes. Both notification and recognition programs are the logical outgrowth of an environmental inventory and can be a first step in establishing a positive relationship with a property owner; such a relationship could evolve into a long-term or permanent commitment to protection.

Nonbinding agreements: Several states operate programs using voluntary nonbinding agreements to protect natural resources. In these programs, a property owner agrees in writing to protect certain designated features of the property that are significant, receiving in return a plaque or certificate that acknowledges the special significance of the property and the owner's contribution to conservation efforts. The owner's obligation to comply is moral, not legal. For instance, The Nature Conservancy administers the Indiana Natural Areas Registry of properties whose owners have agreed to protect habitats for rare and endangered species.

Temporary binding agreements: On the other hand, temporary binding agreements are legally enforceable, albeit temporary, agreements. Typically, these agreements take the form of leases, which can be recorded in the deed. For example, the Ford Motor Company signed a lease with The Nature Conservancy to manage the Ford Eagle Preserve in Michigan to protect a nesting area for the bald eagle. An organization can lease a property to provide an owner with some remuneration in return for foregoing destructive practices. Leasing is also a means of buying time to raise funds for more permanent protection. It may not be necessary to provide an owner with cash in return for the lease; providing consultation or certain types of maintenance may be sufficient.

Easements or conservation restrictions: These are ingenious, often inexpensive ways of protecting property, more specific to the protection needed by a particular property than zoning can be, yet falling short of outright ownership. Conceptually, any piece of

property may be considered as a bundle of "rights." "Fee simple" property owners have complete rights to their property and can do what they please with it, subject only to such governmental limitations as zoning. In an easement transaction, the fee simple owner sells or donates certain property rights. The transaction is recorded in the deed of ownership. The rights thus separated can be defined in any way that is agreeable to the property owner and the recipient of the easement (or such rights may be condemned, as sometimes occurs in the acquisition of public utility rights-of-way). An easement can be permanent or temporary, and generally is binding on subsequent owners of the property. Somewhat different from the easement concept, though related, is the *undivided interest*, or an ownership of a percentage or share of all of the property and its associated rights, which gives an owner of the interest a voice in the management and disposition of a property. The gift of an easement or undivided interest to a nonprofit organization or government may be tax deductible, if all federal and state laws are carefully observed.

Purchase of development rights: "PDR" is the purchase, generally by local or state government, of an easement that extinguishes the right to develop property. PDR programs are often financed by the sale of bonds. First popularized by an experimental program in Suffolk County, Long Island, N.Y., to protect prime farmland, the PDR program has been instituted in Maryland, Massachusetts and Connecticut, among other states. A key aspect of the program in Maryland is that it invites farmers to "bid" their prices for their development rights, so that a participating county can select the lowest-cost development rights in any given round of purchasing.

Transfer of development rights: "TDR" is another experimental program slowly gaining popularity as a means of protecting farmland. Although not strictly an agreement with a property owner, since it also requires public law to put it in place, it is treated here since it is a variation on the easement concept. To conduct a TDR program, a municipality determines an area to be protected, calculates the number of potential development rights existing in the area, and then designates other areas where these development rights can be absorbed or transferred. Property owners selling their development rights can generate cash without actually selling their land. To initiate the TDR program in Montgomery County, Md., county officials took the politically risky step of "downzoning" the area to be protected, by raising the minimum lot size for allowable development from five acres to 25. The downzoning was offset by allowing the farmer to sell development rights based on the old five-acre minimum. The county then had to designate areas where the development rights could be absorbed. This too was politically risky, since residents in areas already developed were not anxious to accept additional density that developers would obtain by transferring their development rights. For TDR to work well, a relatively active real estate market is needed, in addition to a strong education campaign.

How to Acquire Property and Easements

Sophisticated buyers and sellers of real estate make use of a variety of techniques to reduce their costs or participation in the final disposition of the property, to buy the time needed to raise necessary funds or to retain a stake in a property's future. A government agency or nonprofit group can use these same techniques, with the added advantage in many cases of the availability of a federal tax deduction for property owners willing to make donations. In addition to simply buying a property (or easement) outright or obtaining it by donation or bequest, an organization can use the following techniques:

Right of first refusal and purchase options: Both of these concepts involve obtaining a property at a future date. A right of first refusal ensures the holder that should the owner receive a legitimate offer to sell, the holder has the right to match the offer within a brief time period. A purchase option simply means that the holder has acquired the right to buy the property by a specified date at a specified price. Both rights of first refusal and purchase options can be donated as well as sold.

Life estates and leasebacks: In a life estate, the donor of a property retains full ownership and rights in the property until death, when it automatically becomes the property of the nonprofit group, without going through probate. A variation of the life estate is the leaseback, where the donor actually gives the property to the organization which then leases back the property to the donor. The leaseback technique has the advantage of giving the organization control over the treatment of the property during the donor's lifetime.

Bargain sales: The federal tax deduction for charitable gifts makes possible a hybrid acquisition technique, the bargain sale. In the bargain sale, the owner sells the property to the private, nonprofit or government entity for less than the appraised value, taking a tax deduction for the difference. The Trust for Public Land has developed an inexpensive computer program that can help in analyzing the best combination of gift and sale for a particular owner's financial and tax situation.

Revolving fund, limited development: Innovative nonprofit groups willing to risk temporary ownership and to invest cash and extra effort in seeking permanent protection and responsible ownership for significant properties can use the revolving fund concept. In this technique, the nonprofit group creates a fund that can be used to buy a threatened property—if need be at a moment's notice—and sell it with restrictions on alterations and use to a new owner, thus "revolving" its funds back to its coffers for use in another transaction. In its most sophisticated form, the revolving fund transaction can involve limited development: the subdivision and development of the property by the nonprofit group or by developers operating according to restrictions and guidelines laid down by the nonprofit group. Carefully done, such transactions can demonstrate sensitive development while reducing the cost of protection and can even generate a "profit" to be used in

further transactions. Colorado Open Lands has used this approach to protect the spectacular 3,243-acre Evans Ranch west of Evergreen, Colo. Located only 40 miles from Denver and virtually surrounded by public lands, the 116-year-old ranch was divided into five separate ranches of 530 to 580 acres, each with a 40-acre designated homesite hidden from view. The historic ranch headquarters is shared by all owners as an entrance to the property and for collective maintenance of the ranching operation. Colorado Open Lands reserved a portion of the acreage to serve as an educational facility, and is using funds received in the sales as a revolving fund.

For both government and nonprofit organizations, acquiring a degree of control over significant properties requires both patience—some negotiations can take years—and flexibility. Real estate techniques for protecting private property are best used creatively, since each situation may call for a different combination of ideas. An important point to bear in mind is the potential need for swift response to threats—when, for example, an owner dies and a property in the estate must be sold. Finally, the techniques for protecting private property described above should not be exclusively relied upon; the best approach is to seek governmental protection as well through planning and zoning.

Summary

The following are keys to successful communitywide rural conservation programs:

- Programs should, when possible, be comprehensive. They should cover all of a community's resources: natural, scenic, historic and agricultural.
- Creative use and combination of a variety of the techniques described here can achieve more protection than can any single approach.
- Programs should generally involve both a private nonprofit organization and local government working in tandem, recognizing that there are certain elements of a program that can best be implemented by a nonprofit group and others that can best be implemented by local government.
- Public education at all stages and the involvement in the programs of as many citizens as possible will help ensure community acceptance. The ultimate effectiveness of rural conservation depends on the support of those whose land, institutions and livelihood are affected.
- While rural conservationists may not be expert in solving social and economic problems, they should take these problems into account as they develop and implement their programs.
- While there may be immediate crises that need to be addressed, planning for long-term programs are necessary. There is no such thing as a final rural con-

servation solution. There will always be new problems. If organizations and laws are in place, however, these new challenges can be more effectively met as they arise.

Sources of Assistance

Private Nonprofit Organizations

American Farmland Trust: membership organization; demonstrates preservation techniques; administers a revolving loan fund for farmland acquisition and protection; works to influence public policy. *Farmland*, bimonthly newspaper. (1717 Massachusetts Avenue, N.W., Washington, DC 20036.)

American Hiking Society: membership organization; information clearinghouse on trails programs and national and state legislation. *American Hiker*, monthly newsletter. (1701 18th Street, N.W., Washington, DC 20009.)

American Land Resource Association: membership organization; researches land use issues and operates a computerized information clearinghouse; sponsors forums. *American Land Forum Magazine*, quarterly; *ALRA Bulletin*, bimonthly. (5410 Grosvenor Lane, Bethesda, MD 20814.)

American Planning Association: membership organization; monitors developments in planning, sponsors educational programs, prepares publications and lobbies on planning issues; has committees for rural and small town planning, historic preservation and environmental planning. *Planning*, monthly magazine. (1776 Massachusetts Avenue, N.W., Washington, DC 20036.)

American Rivers Conservation Council: membership organization; monitors federal and state protection legislation; provides information on developing wild and scenic river protection programs. *American Rivers*, quarterly newsletter. (322 Fourth Street, N.E., Washington, DC 20002.)

The Association for Living Historical Farms and Agricultural Museums: membership organization; encourages research, exchange of ideas and publication on historical agriculture, rural society, folklife and historical interpretation. *Bulletin*, bimonthly newsletter. (Room 5035, National Museum of American History, Smithsonian Institution, Washington, DC 20560.)

Housing Assistance Council: service organization; works to increase the availability of housing for low-income people in rural areas; administers revolving loan fund, provides technical assistance, carries out research and training programs; series of technical publications on housing programs is available. *HAC News*, biweekly, technical and legislative newsletter. (1024 Vermont Avenue, N.W., Suite 606, Washington, DC 20005.)

Land Trust Exchange: membership organization for land trusts and individuals; information clearinghouse; conducts educational programs, in-

cluding a peer match program for land trust officials; coordinates policy development; and provides technical information on tax aspects of estate planning and land conservation. *Exchange*, quarterly journal. (Box 364, Bar Harbor, ME 04609.)

National Association of Towns and Townships: membership organization; offers technical assistance, educational assistance and public policy support to local government officials. *NATAT's National Community Reporter*, bimonthly newspaper. (1522 K Street, N.W., Suite 730, Washington, DC 20005.)

National Trust for Historic Preservation: membership organization; encourages preservation of America's historical and cultural heritage; regional offices provide field services to assist local efforts; offers publications and educational programs. *Historic Preservation*, bimonthly magazine; *Preservation News*, monthly newspaper. (1785 Massachusetts Avenue, N.W., Washington, DC 20036.)

The Nature Conservancy: membership organization; encourages the preservation of natural diversity through the acquisition and protection of critical habitats. *The Nature Conservancy News*, bimonthly newsletter. (Suite 800, 1800 North Kent Street, Arlington, VA 22209.)

Rural America: membership organization; concerned with rural issues, particularly housing and the needs of low-income and minority groups. *ruralamerica*, bimonthly newsmagazine. (1302 18th Street, N.W., Suite 302, Washington, DC 20036.)

The Trust for Public Land: service organization; concerned with rural and urban open space; educational programs on establishing land trusts and open space protection techniques. (82 Second Street, San Francisco, CA 94105; 245 West 31st Street, New York, NY 10001.)

Federal Agencies

Environmental Protection Agency: undertakes federal environmental protection efforts, researches environmental problems and administers governmental regulation programs. (401 M Street, S.W., Washington, DC 20460.)

Office of Ocean and Coastal Resource Management: administers Coastal Zone Management Act of 1972. (3300 Whitehaven Street, N.W., Washington, DC 20235.)

U.S. Department of Agriculture: contains Agricultural Research Service, Cooperative Extension Service, Farmers Home Administration, Forest Service, Office of Rural Development Policy and Soil Conservation Service. (14th Street and Jefferson Drive, S.W., Washington, DC 20250.)

U.S. Department of the Interior: contains Bureau of Land Management and National Park Service. BLM manages federal lands in 11 western states for multiple use, and the park service, in addition to administering the national parks system, con-

ducts programs for historic preservation and natural areas conservation. (18th and C Streets, N.W., Washington, DC 20240.)

Selected Reading

- American Association of University Women. *AAUW Community Action Tool Catalog: Techniques and Strategies for Successful Action Programs*. Washington, D.C.: Author, 1981. 224 pp.
Provides suggestions for planning and organizing community projects. Subjects range from membership recruitment to organizing public hearings.
- Ashcroft, Mary. *Designating Scenic Roads—A Vermont Field Guide*. Montpelier, Vt.: State Planning Office, 1979. 30 pp. (Vermont State Planning Office, Montpelier, VT 05602.)
Designed to assist citizens and officials interested in protecting scenic roads and in selecting and designating the best roads.
- Brenneman, Russell L. and Sarah M. Bates, eds. *Land-Saving Action*. Covelo, Calif.: Island Press, 1984. 249 pp.
Twenty-nine experts cover a wide range of topics on land conservation, including case studies, easement transactions, federal tax policies and managing easement programs.
- Diamant, Rolf, J. Glenn Eugster and Christopher J. Duerksen. *A Citizen's Guide to River Conservation*. Washington, D.C.: The Conservation Foundation, 1984. 113 pp.
- Flanagan, Joan. *The Grassroots Fundraising Book: How to Raise Money in Your Community*. Chicago, Ill.: The Swallow Press, Inc., 1977. 220 pp.
The Successful Volunteer Organization: Getting Started and Getting Results in Non-profit Charitable, Grassroots, and Community Groups. Chicago, Ill.: Contemporary Books, Inc., 1981. 376 pp.
- Fraser, Elisabeth A. and Anne F. Morris. *Getting It All Together: The Application of Environmental Information to Land Use Planning*. Mendham, N.J.: Association of New Jersey Environmental Commissions, 1980. 323 pp. (Box 157, Mendham, NJ 07945.)
The environmental resource inventory is described in lay terms for use by community groups in carrying out studies of their environmental resources.
- Hawley, Peter. "Revitalizing Downtown: The Main Street Approach." Washington, D.C.: National Trust for Historic Preservation, forthcoming.
Details the successful approach of the National Trust for Historic Preservation's National Main Street Center in working with more than 100 towns ranging in size from 2,700 to 50,000. Discusses coordinating four elements of a downtown revitalization program: organization, promotion, design and economic restructuring.
- Hendler, Bruce. *Caring for the Land, Environmental Principles for Site Design and Review*. Chicago, Ill.: American Planning Association, 1977. 94 pp.
A discussion of principles for planning of new construction and subdivisions, including consideration of visual impact.
- Hoose, Phillip M. *Building an Ark: Tools for the Preservation of Natural Diversity through Land Protection*. Covelo, Calif.: Island Press, 1981. 221 pp.
This how-to book covers topics ranging from state natural heritage inventories to real estate and land management techniques such as easements.
- Keller, Genevieve P., J. Timothy Keller, Samuel N. Stokes and A. Elizabeth Watson. "The Rural Conservation Handbook." Washington, D.C.: National Trust for Historic Preservation, forthcoming.
A much expanded version of topics discussed in this Information Sheet.
- Kusler, Jon A. *Regulating Sensitive Lands*. Cambridge, Mass.: Ballinger Publishing Co., 1980. 256 pp.
Examines state and local policies for resource conservation, including methods of defining sensitive lands, performance standards and regulatory programs aimed at such resources as wetlands and coastal areas.
- Lang, J. Christopher. *Building with Nantucket in Mind: Guidelines for Protecting the Historic Architecture and Landscape of Nantucket Island*. Nantucket, Mass.: Nantucket Historic District Commission, 1978. 128 pp. (Nantucket Historic District Commission, Town Building, Broad Street, Nantucket, MA 02554.)
Extensively illustrated guidelines demonstrate a sensitivity to both scenic and architectural qualities of a historic landscape.
- Lemire, Robert A. *Creative Land Development: Bridge to the Future*. Boston, Mass.: Houghton Mifflin, 1979. 153 pp.
A description of how natural resource protection can be integrated with land development to build balanced communities. Case studies included.
- McHarg, Ian L. *Design with Nature*. Garden City, N.Y.: Doubleday, 1971. 198 pp.
Essays and case studies stress the need for environmental design in harmony with the natural conditions of an area.
- Melnick, Robert Z. *Cultural Landscapes: Rural Historic Districts in the National Park System*. Washington, D.C.: U.S. Department of the Interior, 1984. 80 pp.
While intended for national parks, should be useful to all preservationists developing National Register nominations.
- National Association of State Departments of Agriculture Research Foundation Farmland Project. *Farmland Notes*. Washington, D.C.: Author, monthly. (1616 H Street, N.W., Washington, D.C. 20006.)
Useful newsletter covering local, state and federal developments in farmland protection and policies.

National Trust for Historic Preservation. Information Series. Washington, D.C.: Author.

Several other titles in this series will be of interest, including:

"Basic Preservation Procedures" (#20); "Establishing an Easement Program to Protect Historic, Scenic and Natural Resources" (#25); "Archeology and Preservation" (#28); "The Development of Rural Conservation Programs: A Case Study of Loudoun County, Va." (#29); "Preserving Large Estates" (#34); "Saving Historic Bridges" (#36). Write for a complete listing.

National Wildlife Federation. *Conservation Directory*. Washington, D.C.: Author, annual edition.

Lists private organizations and government agencies at the national and state levels that are concerned with conservation. Briefly describes each organization and names its key officials.

Sargent, Frederick O. *Rural Environmental Planning*. South Burlington, Vt.: Author, 1976. 199 pp. (330 Spear Street, South Burlington, VT 05401.)

Addresses the concepts, techniques and procedures of planning in rural America, especially inventory analysis.

Schauman, Sally and Mary Pfender. *An Assessment Procedure for Country Landscapes*. Seattle, Wash.: University of Washington, Department of Landscape Architecture, 1982. 115 pp.

Small Town Institute. *Small Town*. Ellensburg, Wash.: Author, bimonthly. (P.O. Box 517, Ellensburg, WA 98926.)

Covers a wide range of topics of interest to rural leaders "concerned with finding new solutions to the problems facing small towns and countryside communities."

Smith, Herbert H. *The Citizen's Guide to Planning*. Chicago, Ill.: American Planning Association, 1979, rev. ed. 198 pp.

Covers the duties of the planning commission, the comprehensive plan, planning through the capital budget and community improvements, the relationship of planning to zoning and citizen action.

_____. *The Citizen's Guide to Zoning*. Chicago, Ill.: American Planning Association, 1983. 242 pp.

A concise manual explaining the philosophy, constitutionality and administration of zoning. Reviews the role of citizens, explains the variance procedure and briefly examines emerging techniques.

Steiner, Frederick. *Ecological Planning for Farmlands Preservation*. Chicago, Ill.: American Planning Association, 1981. 122 pp.

A comprehensive guidebook for communities to help determine what agricultural land to preserve. Details how to analyze natural resources and existing land uses.

Steiner, Frederick R. and John E. Theilacker, eds. *Pro-*

tecting Farmlands. Westport, Conn.: Avi Publishing, 1983. 312 pp.

Covers the gamut of farmland preservation concerns, including federal policies, case studies and guidelines for community action.

Thurrow, Charles, William Toner and Duncan Erley. *Performance Controls for Sensitive Lands: A Practical Guide for Local Administrators*. Chicago, Ill.: American Planning Association, 1975. 165 pp.

Explains how five environmentally sensitive resources can be protected through local government.

U.S. Department of Agriculture, Office of Rural Development Policy. "Rural Resources Guide: A Directory of Public and Private Assistance for Small Communities." Washington, D.C.: U.S. Government Printing Office, forthcoming (October 1984). 600 pp.

U.S. Department of the Interior, National Register of Historic Places. *Guidelines for Local Surveys: A Basis for Preservation Planning*. Washington, D.C.: U.S. Government Printing Office, 1977. 83 pp.

This Information Sheet revises and updates Information Sheet No. 19, "Rural Conservation." This new edition was prepared by A. Elizabeth Watson, field representative, and Samuel N. Stokes, director, Rural Program, National Trust for Historic Preservation; and by Genevieve P. Keller and J. Timothy Keller, consultants, Land and Community Associates, Charlottesville, Va.

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