

UC Berkeley

The George Wright Forum

Title

Agricultural Ecosystems

Permalink

<https://escholarship.org/uc/item/7np6g7h4>

Journal

The George Wright Forum, 3(1)

ISSN

0732-4715

Author

Wheeler, Douglas P.

Publication Date

1983

AGRICULTURAL ECOSYSTEMS

Douglas P. Wheeler

A return visit this summer to Jackson Hole and Grand Teton National Park permits me to speak today with the remorse of an infidel, on one hand, and the zeal of an evangelist on the other. For I had gone back to Jackson not so much in order to absorb anew the inescapable beauty of those magnificent mountains, but to worry with Jackson conservationists about the tide of development which threatens the Snake River Valley agricultural lands...so much a part of the landscape of this picturesque region. More suited to cattle than crops, these lands are as much a part of the history, culture, and geology of Jackson Hole as the Tetons themselves. David Saylor writes that the first settlers of Jackson Hole, five Mormon families from Utah, were attracted to a wetter climate east of the Tetons, "where their starving livestock could graze on the abundant hay of that region." At least since the fall of 1889, then, agriculture has contributed to the appeal of this region. Today, it is difficult to imagine a vision of the Tetons that does not include the Valley ranchland, strewn with the herds of prosperous cattlemen.

I offer this brief reminiscence to underscore that there are places where park and agricultural resources co-exist as part of a land use continuum, and where such uses are at least visually compatible. This example of a fundamental relationship between agriculture and park resources may also serve to justify the inclusion, on a program devoted otherwise entirely to natural resources of a less productive sort, of "agricultural ecosystems." It is certainly true that agriculture and agricultural lands serve to provide the natural and cultural setting for other, more striking features of parks and natural preserves, as in Jackson Hole. And sparsely populated farmland may also serve to "buffer" important parkland from adjacent development in a way which seems more natural than if the transition were physically abrupt. Because forests and open range are agricultural lands, within the meaning most widely accepted, there are parks which can be said to include within their boundaries large acreages of agricultural land.

Having thus established at least three instances in which agriculture and other kinds of natural systems might relate to one another within the park context, I hasten to assert that none of these constitutes serious rationale for the growing national commitment to conservation of our agricultural land resource. Rather, we must be concerned about farmland protection because American agriculture is an incredibly productive enterprise, and because preservation of its land base is the *sine qua non* of continued productivity. Despite the open space and amenity values with which the "agricultural lifestyle" has been imbued of late, there can be no mistaking that we must protect agricultural ecosystems because human beings need to eat. By the very nature of the land's productive qualities and the human effort required for

optimal productivity, the preservation of agriculture and its land base may sometimes work at cross purposes with, rather than in support of, the protection of more static natural values.

While I do not propose that we deal today with such longstanding land use conflicts as irrigation in Jackson Hole, grazing on the tall grass prairie or cultivation of winter vegetables in the Everglades, I raise these problems in passing to acknowledge their existence, and to recommend that more careful consideration be given to reconciliation of the differences between farmers and ranchers on one hand and park managers on the other.

I have construed the invitation to join you not so much as a request to discuss "agricultural ecosystems" themselves, as there are others far better qualified to do so, but to place emphasis on the means by which we might protect this critically important — and heretofore overlooked — natural resource. As other speakers have noted, these are not the best of times in which to seek new public commitments to the protection of natural resources, no matter how important to the future well-being of the Nation. Thus, notwithstanding the genuine concern of Secretary Block about the conversion of farmland and the loss of productive soils, we must look elsewhere for leadership in the development of new conservation strategies. To a surprising degree, as documented by the National Agricultural Lands Study, such leadership is being provided by state and local government. At the same time, and often working in tandem with the public sector, private land trusts and other non-profit institutions have begun to play a pivotal role in the protection of agricultural land. While many of the techniques being developed for this purpose will be familiar to those experienced in conservation of other natural resources and protection of our cultural heritage, the character of agriculture as a productive enterprise necessitates the development of new strategies, as well. The American Farmland Trust has among its principal objectives the demonstration of such techniques, and I am pleased to be able to share an overview of the preservation techniques that have been utilized by AFT since our incorporation in 1980. In presenting this summary of the state of the art, I borrow liberally from the draft of a chapter on private landsaving techniques which has been written by our Counsel, Edward Thompson, Jr., for inclusion in a book edited by Russell Brenneman, the noted conservationist and attorney.

Unless a dramatic breakthrough occurs in agricultural technology, within a decade or so the land itself will once again become — if it ever ceased to be — the most important factor in the U. S. agricultural production equation. The nation now has roughly 413 million acres under cultivation and another 127 million in its cropland reserve. If crop yields continue to increase only at current rates, the USDA projects that to meet an anticipated 65 to 80 percent increase in demand for American farm products within the next 20 years, an additional 77 to 113 million acres of land will have to be brought under cultivation.

Viewed in this light, the prospect of losing 60 million acres over that period is significant. Statistically that's almost half our reserve, but the resource implications would be even more serious than the numbers alone suggest.

Our so-called cropland reserve consists of marginal lands now used for pasture, rangeland and forestry because of thin soils, steep slopes and lack of moisture. Cultivation of this land undoubtedly would increase erosion, exacerbate water competition, increase total food production costs and, perhaps, reduce livestock and forest production. It could also result in the conversion to intensive agricultural uses of prairie wetlands and bottomland hardwood forests, included in the reserve despite their value as waterfowl and seafood nurseries. As Secretary of Agriculture John Block once explained, "The chain of problems would be lengthy and expensive."

If the nationwide implications of agricultural land conversion are just over the horizon, its local and regional implication occupy the foreground of public concern. Nonfarmers are preoccupied with the disappearance of open space and the deterioration of air and water quality that often accompanies conversion. Although these may be serious for localities that are attractive places to live because of scenic and environmental qualities, equally significant are the implications of the loss of open space for agricultural production.

Open space is as important an input to production as are seed and fertilizer. Modern agriculture relies on technology to sustain crop yields and tends to produce odors, noise, dust, chemical spray drift and other spillover effects that cause problems for nearby residential areas. Farmers often find that the conversion of adjacent land to nonagricultural uses leads to strict local government regulation of once-routine farming practices and sometimes to litigation over what their new neighbors consider nuisances. These pressures on agriculture increase production costs and downtime, and can lead to retaliation in the form of farm thefts and vandalism, as the countryside becomes more crowded.

What is more, the loss of open space to suburban sprawl tends to increase property taxes because of the higher community service costs entailed. Higher taxes further reduce net farm income and hasten land conversion. As the number of farms in a region declines, agriculturally related businesses suffer, and if they fail, remaining farmers incur still higher production costs by virtue of uncertain supplies, reduced competition and the need to travel farther to have equipment repaired. Ultimately, the level of agricultural activity may be so diminished that there no longer exists a critical mass. Long before all the agricultural land in a locality succumbs to conversion, agriculture as an economically sustainable enterprise may cease.

Whether agricultural land conversion is seen as a threat to amenities and the quality of life, or to the continuation of the business of agriculture, it is an immediate cause for concern just

about everywhere that nonagricultural land uses are encroaching into the rural countryside. Public policymakers have not been inattentive to the concerns of their rural constituents, farmers and nonfarmers alike. The result has been a recent flurry of policy legislation aimed at conserving agricultural lands. For better or worse, public policy defines private opportunity in this context, not least by confining it largely to charitable ventures.

Private organizations have traditionally conserved land by relying almost exclusively on charity, purchasing interests in land with funds derived from tax-deductible contributions, and accepting tax-deductible charitable contributions of such interests in land as conservation easements. Because the amount of agricultural land is so high, unless federal tax policy is changed to provide incentives to conservation that go beyond a stimulus of charitable instincts, private sector agricultural land conservation must be content to remain a supplement to governmental conservation programs. As we shall see, this observation by no means diminishes the important contribution that private organizations can make in the agricultural land conservation field.

Over half the states and literally hundreds of local jurisdictions have adopted measures to conserve farm and ranch lands, and new variations and combinations of the basic techniques they use are being devised all the time. A complete survey appears in a highly useful publication of the *National Agricultural Lands Study*, entitled *A Reference Guidebook for State and Local Governments*.

All but one state have adopted some form of preferential taxation of agricultural land as a means of reducing financial pressure on farmers and forestalling premature land conversion. Sometimes called current use value taxation, such measures typically require that agricultural land be assessed at its lower agricultural production value—what a farmer can pay for land and still make a go of it—rather than at its "highest and best use," a formation that often makes development a self-fulfilling prophecy. In some cases, taxation is merely deferred or a penalty is imposed when the land is converted to nonagricultural use. However, in the absence of complementary land use controls, preferential taxation can amount simply to a subsidy of land speculation.

An important variation of preferential taxation is used by Wisconsin in conjunction with planning and zoning. In counties where agricultural zoning has been adopted, farmers qualify for a state income tax circuit breaker, in effect a tax credit that varies inversely with income and is based on property tax burden but does not reduce local revenues. In Wisconsin as well as states like California, farmers may also qualify for preferential taxation by signing an agreement to forego development of their land for a specific period of time, in effect the voluntary equivalent of public land use controls.

Modern agricultural zoning bears only superficial resemblance to traditional zoning that classified rural areas as residual land where almost any use was permissible. The most widely employed

agricultural conservation technique, agricultural zoning is generally adopted as part of a larger land use control scheme based on a comprehensive plan that balances growth and resource conservation. New variations of agricultural zoning are continually evolving.

Large lot zoning is the most primitive conservation technique, forbidding subdivision of parcels smaller than a certain size, ranging from 10 to 160 acres depending on the minimum acreage required for successful farming. A criticism of this approach is that when a purchaser can afford a large residential lot, the amount of agricultural land taken out of production is much greater than necessary. To solve this problem, fixed area allocation zoning was developed, requiring a minimum parcel size but further requiring that houses be clustered on as few acres as possible within the larger tract. A further refinement is represented by sliding scale zoning which reduces the density of permissible development as parcel sizes increase. Thus, 5 houses may be permitted on the first 100 acres of a farm, but only one additional house for each additional 100 acres. These approaches tend to produce strip development along roads.

Conditional use zoning permits nonagricultural development in rural areas only if it satisfies criteria related to soil classification, relationship to agricultural production units and proximity to existing urban services. This approach concentrates development near established urban centers and minimizes land use conflicts, while the former techniques can result in scattered subdivision. While all of the foregoing permit a limited amount of non-agricultural development in rural areas, primarily as an accommodation to landowners, exclusive agricultural zoning simply forbids all nonagricultural use of land within a delineated zone and encourages development within separate urban service boundaries. To be truly effective, all of the agricultural zoning techniques must be coordinated with state and local capital improvement programs so that, for example, water and sewerage are not extended into agricultural zones to frustrate the intent of their establishment.

A popular agricultural land conservation technique used by states is agricultural districting, which generally allows farmland owners to agree to forego development of their property for a period of years in exchange for certain benefits such as protection from condemnation and excessive regulation or, indeed, the tax preferences discussed above. This approach is the functional equivalent of agricultural zoning, but its coverage of the land is less comprehensive, usually producing a checkerboard pattern of conservation and unrestricted lands. The chief drawback of this technique is that, because it is voluntary, it tends not to result in the conservation of the agricultural lands that are most threatened by conversion because of their greater development potential. Nevertheless, districting is important and effective because it commits land to future agricultural use and, thus, combats the psychology of impermanence that often accompanies changing land use patterns and hastens the demise of regional agriculture. In some

states, a majority of the agricultural land is conserved within districts.

At the other end of the spectrum from agricultural zoning, which tends to be coercive and nonremunerative in its effect on landowners, is the purchase by state and local governments of the "development rights" to agricultural lands under voluntary agreements with landowners. Six states and a couple of local jurisdictions have now adopted this technique and, with further refinements that hopefully will reduce its cost to the public treasury, it promises to become even more popular in the future.

Typically, the price paid for development rights — the equivalent of a conservation easement restricting the use of land to agriculture — is the difference between its fair market value for development and its value for agricultural production purposes. The landowner, who is not always the farmer who cultivates the land — a very significant point, retains title to the land and is, of course, free to continue its farm use or to sell it to anyone who is willing to use it for agriculture. Jurisdictions that employ this technique are usually very selective about which land they target as priorities for purchase of development rights (PDR), basing their selections on soil fertility and strategic location of farms. A major question raised by the need to set priorities is whether agricultural land should be purchased only if it is under a threat of conversion, in which case the price is likely to be higher, but the substantive results are more tangible, than if land is purchased in areas where there is little development pressure.

The combination of PDR with other techniques such as agricultural districting and zoning can result in a very effective conservation program. In Maryland, for example, the purchase by the state of development rights to about 8 thousand acres and the establishment of districts on another 50 thousand (a prerequisite to PDR under state law) have served as political justification for local agricultural zoning that conserves some 800 thousand acres of agricultural land. The negative effects of land use controls are mitigated by the prospect of eventual compensation of landowners.

An innovating but as yet experimental variation of PDR is the transfer of development rights approach used in a handful of localities. Farmers whose land has been downzoned are compensated, not by government, but by private developers who purchase development rights that entitle them to build at higher densities within designated receiving areas near existing urban centers. This technique relies not only on strict zoning but also on strong demand for growth to create a market for development rights.

Land use control programs such as agricultural zoning and, to some extent, agricultural districting, create opportunities for private conservation by narrowing the field of agricultural lands that should be targets of easement and fee title acquisition. Even if nonagricultural development is not entirely forbidden within a given area, the pace of development is generally regulated so

that private conservation organizations can concentrate their attention on farms that successively come under the threat of conversion. Further, agricultural zoning may reduce the asking price of agricultural land by making the prospect of holding out for rezoning a risky proposition. An offer to purchase a conservation easement or the prospect of a tax deduction resulting from the donation of such an easement to a private organization may look significantly more attractive in this context.

As examples of how private conservation organizations can capitalize on the opportunities presented by land use controls, consider the following. In lieu of selling off a number of building lots under a fixed area allocation zoning scheme, a landowner may find that the donation or bargain sale of a conservation easement on all or part of his land will yield just as great a return. Or, prior to putting land into an agricultural district under contract with the state, a landowner may find it advantageous to donate an easement to a private organization and obtain an additional financial bonus. The latter approach would be especially attractive to a farmer who plans to retire before the term of the contractual agreement with the state expires.

Another opportunity presented to private conservation organizations in states and localities that have adopted PDR programs is, of course, the chance to pre-acquire agricultural land in anticipation of the later resale of development rights. The American Farmland Trust is negotiating to purchase farms from landowners who are unwilling to deal directly with government, or whose need for cash is more immediate than the state's ability to close a PDR transaction. In the typical case, the farm will be purchased in fee, the development rights will be sold to an authorized state agency, and the underlying land will be conveyed at less than half its fair market value to a young farm family that otherwise might not have the opportunity to own a spread of their own.

In such situations, the opportunity also exists for a bargain sale, enabling the private organization to take advantage of the deductibility of charitable donations of interests in land to purchase agricultural land at less than its fair market value. This can, in turn, enable conservation organizations to increase the chances of reselling development rights to government by offering to do so at a reduced price, often a consideration of state agricultural conservation agencies. Care should be taken, however, to make sure that private conservation organizations are in fact eligible sellers of development rights under the applicable state PDR program. Attention must also be paid to the quality and location of the agricultural land, since state PDR agencies generally establish purchase priorities under strict guidelines.

Another private technique that can be used to assure that highly productive and strategically located farms, those targets of opportunity, do not suddenly succumb to conversion is the ne-

gotiation of purchase options and rights-of-first-refusal with farmers. The former enable private organizations to purchase interests in agricultural land at a specified price whereas the latter entitle them to pre-empt any third party purchase offer by matching it. The favorable tax consequences of a purchase at less than fair market value may give private conservation organizations additional leverage in negotiating a pre-emptive acquisition contract with flexible terms, including the possibility of matching an offer with different terms that yield the same net return.

A variation of the "government cooperative" approach to private land conservation, which has particular applicability in the agricultural context, is limited development. Whereas the development of a portion of a tract of critical wildlife habitat may defeat the purpose of its acquisition by a conservation organization, the subdivision of a few building lots from a larger farm may be entirely appropriate, provided that houses are located on the least productive soils and placed where they will present the least possibility of conflict with active farm operations...upwind! Moreover, the subdivision of one or more building lots may be the only way that a private conservation purchaser can break even on a transaction because of the relatively higher market value of agricultural land in contrast with most ecologically significant lands.

One of the most important private conservation opportunities created by the existence of governmental agricultural conservation programs and policies—an opportunity that would be lacking but for such policies—is that of negotiating agricultural conservation easements which permanently restrict land to agricultural uses. If such easements meet the tests of the Internal Revenue Code, their donation to qualified private organizations can result in a tax deduction to the landowner.

Section 170(h) of the Code provides that conservation easements qualify for tax deductions if they serve the conservation purpose of "the preservation of open space (including farmland and forest land) where such preservation is for the scenic enjoyment of the general public or pursuant to a clearly delineated Federal, State or local governmental conservation policy, and will yield a significant public benefit." No Treasury regulations have as yet been issued to clarify the ambiguous terms of this statutory provision, so that interpretation is largely a matter of conjecture.

The Code thus basically establishes two conditions for agricultural conservation easements. First, they must further a clearly delineated government conservation policy. The purpose of this requirement is apparently to prevent the "locking up" of any land that arguably could support agriculture when, in the judgement of local officials, it would be better suited to development. Second, the easement donation must yield a significant public benefit, the apparent rationale being that the public must expect to receive something of value in exchange for subsidizing conservation with tax dollars. These two conditions tend to

merge to the extent that the existence of a governmental conservation policy can be said to be prima facie evidence that the agency which adopted it was of the official opinion that a public benefit would thereby result.

On the question of which governmental agricultural conservation policies meet the "clearly delineated" test, the Committee Report on P.L. 96-541 notes that a single policy statement by a public official or a legislative body is insufficient. The Report does suggest, however, that something less than a conservation program backed up by an appropriation or other commitment of public funds may suffice. Programs which devote public funds to the purchase of agricultural land development rights would, therefore, almost certainly meet the policy test. Arguably, programs granting tax preferences which imply revenue foregone and those which merely involve administrative expenses, as in the case of zoning and districting, could also meet the test, provided, of course, that the conservation of agricultural land for agricultural purposes is an expressly-stated purpose of the program.

The Committee Report further says that the governmental conservation policy must represent a "significant commitment with respect to the conservation project." This would seem to imply that the specific parcel of agricultural land on which an easement will be imposed must fall within the general class of lands sought to be conserved by the governmental policy. Thus, if a farm is located outside of an agricultural zone where zoning for agricultural conservation exists, or if it is located within an urban service boundary where development is officially encouraged, private conservation organizations should be reluctant to accept easement donations if the landowner expects a tax deduction. In contrast, it would not appear that the failure of a landowner to place his land within an agricultural district under an applicable state program, would necessarily defeat a tax deduction for an easement donation, so long as the land would qualify for inclusion within a district under state criteria. The Report, in this regard, notes that a sufficient governmental program need not include a means of certifying specific parcels of agricultural land as within its conservation ambit. Obviously, programs which do involve certification would have an excellent chance of meeting this test. Zoning classification as well as districting, and even preferential taxation of agricultural land if strings are attached, arguably could be considered certification. The key point remains that the particular agricultural land in question must somehow be distinguished from "just any old land" and an official body must recognize the distinction.

In making the case for the validity of agricultural conservation easements, private conservation organizations would be well advised to "piggyback" governmental policies where, for example, both the state and the local jurisdiction in which the land is located have adopted them. The strengths of one may compensate for the weaknesses of others, so that the entire fabric of applicable public policy, viewed as a whole, can be seen to represent

a commitment to agricultural land conservation. In this regard, the recently-enacted federal Farmland Protection Policy Act may also be cited as a clearly delineated policy commitment to agricultural land conservation.

There is little question that the Farmland Protection Policy Act represents a clear commitment by the federal government to the conservation of agricultural lands. Arguably, private conservation easement donors might rely exclusively on this governmental policy to support a tax deduction claim. The problem with this approach lies in referring the specific parcel of agricultural land in question to the object of the remote federal policy. The federal statute contains a definition of "farmland," but we seek to refer the land in question to the class of lands that state or local policy seeks to protect, and then to piggyback the federal policy with its reference to state and local programs and policies.

The second condition for the validity of agricultural conservation easements is that they "yield a significant public benefit." Again, one might argue that the existence of a clearly delineated governmental conservation policy alone would necessarily imply that its sponsors held the belief that a significant public benefit would thus accrue. The general principle that governmental action must serve a legitimate public purpose bolsters this conclusion. The Committee Report states, however, that the public benefit of an easement donation should be evaluated on the basis of "all information germane to the contribution," and lists several relevant factors to be considered.

The "uniqueness of the property" is one such consideration. Again, we see the notion of distinguishing a specific parcel of agricultural land from other lands that may be capable of supporting farming or ranching. A conundrum is raised by the fact that agricultural land is more or less undifferentiated. True, there are various soil classifications but Class IV soils, generally thin and steeply sloped, may be as important because they can support high value orchard crops, as Class I soils, the flattest, deepest, most productive land. Improvements made by the farmer, such as investments in soil conservation, special equipment and farm structures also may be relevant to the uniqueness of the property. All other things being equal, an especially efficient and conscientious farm operation may single out a particular farm as deserving of conservation treatment.

Another factor that the Committee says should be considered in evaluating public benefit is "the intensity of land development in the vicinity of the property (both existing development and foreseeable trends of development)." The theory behind this consideration seems to be that the greater the threat that a parcel of agricultural land will be converted to nonagricultural use, the greater public benefit can be said to obtain from its conservation. One might argue that this consideration serves little purpose, since the value of an easement declines as development pressure and fair market value of agricultural land decrease, and thus the public benefit and loss of revenue to the

treasury would be self-regulating. Nonetheless, the best approach to take in demonstrating public benefit to be derived from the donation of an agricultural conservation easement would seem to be to document the conversion of agricultural land in the jurisdiction (preferably in the locality rather than statewide) and recent increases in land values (including the assessment of the agricultural land in question) as an indicator of future development trends. In areas where there is little or no development pressure, the consideration of this factor may weaken the case for an easement donation, but the inherent productivity of the land and investments in soil and water conservation or other improvements may be compensating factors. As noted earlier, some states purchase development rights to agricultural land whether or not it is in jeopardy of conversion, and the same principle applies to private transactions. Of course, if none of these factors is present and the purpose of an easement is really to preserve a scenic vista or environmental amenities in a remote area, reliance on those aspects of the tax code addressed to agricultural land conservation may simply be an ineffectual make-weight.

Finally, the Committee Report includes as criteria of public benefit "the consistency of the proposed open space use with public programs for conservation in the region, including programs for water supply protection, water quality maintenance or enhancement, flood prevention and control, erosion control, shoreline protection and protection of land areas included in, or related to, a government approved master plan or land management area." The nexus between the existence of a government conservation policy and public benefit, noted above, is reinforced by this language. As already noted, agricultural land conservation may serve purposes other than conserving agricultural production capacity and it does no harm to recite these other benefits in easement instruments along with the policies intended to produce them.

As mentioned earlier, the conservation of agricultural land for the purpose of protecting the business of agriculture and the nation's agricultural capacity is a different proposition than preserving open space for its scenic beauty or ecological significance. The most beautiful farm may not always be the one that deserves to be saved. And ecological purity usually takes a back seat to the practical considerations of farming when it comes to management of the land. Because of these differences, there are special considerations that private sector conservation organizations must give to the selection of agricultural lands for conservation and to their management as a "working landscape."

As implied earlier, states and local governments generally establish their own criteria for selecting which agricultural lands within their jurisdiction should be conserved and which should be devoted to nonagricultural uses. If a private conservation organization hopes to cooperate with a governmental entity in purchasing a farm, or if it wishes to have the donation of an agricultural conservation easement qualify for a federal tax deduction, attention must be paid to the specific land selection

criteria established by the governing jurisdiction. In general, there are four basic criteria that often are used to determine the relative importance of agricultural land as a target for conservation.

Soil quality is obviously highly important because productive soil is fundamental to agriculture. The U. S. Soil Conservation Service, with offices in most counties in the nation, officially classifies soils into 7 groups, based on their depth, ease of tillage, moisture content and slope. Flat, well-drained, deep soils with good tilth are designated Class I soils, the best that exist. Classes II and III soils rank just below the top and, along with Class I, are generally defined as "prime" agricultural land, although they may not be as deep, may have steeper slopes or be wetter or drier. Farms that are comprised of predominantly prime soils are the most important targets of conservation, all other considerations being equal. Class IV land often is highly suitable for orchard crops because its still steeper slopes promote air drainage and reduce the risk of frost damage. Some Class IV lands, as well as those in better soil classifications, are termed "unique" agricultural land because their microclimate allows the production of specialty crops such as fruits, nuts and vegetables. These too are important conservation targets. Soil information can be readily obtained from the local SCS office, where detailed county soil maps are available. SCS technicians can help interpret this information.

Location of agricultural land is important for a number of reasons. First, as explained above, many private approaches to conservation depend upon the existence of a governmental conservation policy which applies to the agricultural land in question. If the jurisdiction in which an important farm is located does not have a sufficient conservation policy, we strive to encourage the adoption of one.

Second, for purposes of allowing for balanced growth and development, farms should not be located in areas where future urban growth should logically occur. Although it smacks of triage, farms can be divided into three rough groupings by location: those so close to existing urban settlements that their development is appropriate, those so far away from development pressure that active measures to assure their conservation probably are not called for, and those in the middle which are productive enough to conserve but which are under significant development pressure. As a general proposition, private conservation should concentrate its attention on the third group in order to maximize its effectiveness.

Third, farms should be located within areas where agriculture is the predominant land use. An analogy can be drawn to agricultural zones and districts, the purpose of which is to conserve relatively large, contiguous agricultural areas so as to minimize the risk that farming will come into conflict with nonagricultural uses, and to assure that a critical mass of land continues to support the business of agriculture. The conservation of a "keystone"

farm can spell the difference between the success or failure of surrounding farm operations.

The size of a farm parcel is another factor to consider in the selection of conservation priorities. Although there are no hard and fast rules, generally speaking the most important targets of conservation are tracts of land that constitute an economic production unit, or which can be added as logical extensions to other existing farm units. Because of the economics of farming, some parcels are simply too small to support the commercial production of the crops that can be grown in a given climate and with a certain amount of investment. If, however, a smaller parcel can be added to a larger neighboring farm, or if some agricultural use can be made of it, size becomes less of a consideration, except as it relates to price.

Finally, the actual and potential use of agricultural land should be considered. Farms on which landowners have practiced good soil and water conservation, in which buildings and other infrastructures have been kept up by adequate investment, and which hold the potential to be used to grow a variety of crops are more attractive conservation targets than those that have been worn out or neglected. Adequate investment in farm operations is also a good indicator that the location of a farm makes it suitable for conservation, because if an area becomes too urbanized farmers tend to neglect upkeep in anticipation of selling the land for nonagricultural use. Investment in soil conservation is especially important because it makes little sense to conserve the land, if the soil is allowed to wash or blow away.

To these four physical criteria might be added the price of the land, if the private conservation organization intends to purchase the farm rather than accept an easement. In this respect, care should be taken not to pay more for a parcel of land than can be recouped by selling development rights and the underlying fee to a competent farmer. Again, farmers can pay only so much for land and still make a living from it, considering the specific crops and type of operation which the climate and business environment permit.

Those of us who attempt at the national level to assess the site-specific importance of threatened farmland, without benefit of a National Register or comparable document, welcome the development by the Soil Conservation Service of its comprehensive Agricultural Land Evaluation and Site Assessment System (LESA). Used in conjunction with the well-established Soil Classification System, LESA is intended to (1) compare relative values of agricultural land, and (2) assess the viability of retaining a specific site in agricultural use. The LESA System has been tested in 12 pilot counties, and is now being introduced nationally through the SCS network of State Offices.

Again, conserving a working landscape is different from conserving scenery or wildlife habitat because it necessarily implies manipulation of the environment, the very essence of agriculture. Private conservation organizations that hold easements on agricul-

tural land have an obligation to assure that the purpose of the restrictions embodied therein is upheld. In exercising this responsibility, conservationists should take care not to impose restrictions on the land that could so limit the flexibility of the farm operator that as a practical business matter agriculture is no longer a possible use of the land. In actual practice, farm operators themselves will understand the nuances of this general proposition and will not be likely to agree to excessive restrictions if they themselves intend to remain on the land.

Perhaps more than anything else, the selection of a competent, conscientious farm operator—one who "comes with" the farm or who expresses an interest in acquiring land conserved by purchase—is the key to assuring sensitive, businesslike farm management. After all, if our goal is to conserve the nation's agricultural capacity and the vitality of the local agriculture industry, we must save farmers as well as the land.

Douglas P. Wheeler, President, American Farmland Trust, Washington, D. C.

PROTECTING RURAL CULTURAL LANDSCAPES

Finding Value in the Countryside

Robert Z. Melnick

Introduction

The latest developments in natural and cultural resource preservation are heartening. We are witnessing a metamorphosis of the preservation "movement" from a single-issue concern to a multi-dimensional expression of caring for the world around us. This expression of caring, in the most human sense, is a reflection of both fear and hope for our natural and national treasures. To a certain extent increased activity in all facets of preservation is a response to new threats to these resources, as well as new understandings of the ways in which both natural and cultural resources are vital to our biological and human existence.

This has not always been true. Those concerned with natural resources and those concerned with cultural resources have often viewed themselves at odds with each other. There seemed to be an inherent conflict between caring for wilderness and caring for ancient artifacts. Natural resource conservation and cultural resource preservation seemed to stake out distinct territories, and guard those territories at all costs. Natural resource conservation adhered to a holistic view of the world; a view basic to an ecological understanding of our universe. Cultural resource preservation seemed to be mired in a piece-meal approach. Saving each artifact, whether archeological or architectural, became the goal. There appeared to be purposeful disregard for their interconnections.