Soil Conservation Service/Tim McCabe

Agricultural policy and aesthetic objectives

By Joan Iverson Nassauer

WHILE the Food Security Act of 1985 was revolutionary in pairing production control strategies and broad conservation intentions, its effect in changing the appearance of rural America largely has gone unexamined. The look of the land may be critical to farmers' decisions to participate in key provisions of the act and to economic development benefits realized by rural communities. The potential to intentionally enhance the visual appeal of the landscape should not be overlooked as conservation provisions of the 1990 farm bill are developed.

The visible consequences of agricultural policy most appropriately are labelled aesthetic effects. The attractiveness of the rural landscape is a market externality. But it is integral to daily life, underpinning economic decisions about the land. Agricultural policy affects landscape aesthetics in much the same way now as it affected habitat and water conservation prior to the Food Security Act of 1985. Aesthetic effects result from current policy, but to date the policy has not been directed toward manipulating those effects.

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Reprinted from the Journal of Soil and Water Conservation
September-October 1989, Volume 44, Number 5

Nonetheless, aesthetic effects unarticulated or cloaked by other labels play into agricultural land management and policy decisions. No one who has worked closely with farmers will be surprised to learn that some farm management decisions are made not for economic reasons but to make the farm look attractive. Herbicide may be applied to achieve a weed-free appearance well past the margin of increased crop production. Or highly visible conservation practices, such as stripcropping or grassed-backslope terraces, may be installed in part because they look good and show that the farmer cares about conservation. Conversely, farmers may be reluctant to adopt conservation practices that contradict aesthetic norms for attractive agricultural land. Consider initial reactions to conservation tillage. Anecdotal reports suggest that the unkempt appearance of perennial cover, at least in comparison with neat, straight rows of corn, may influence farmers' decisions to participate in the Conservation Reserve Program (CRP) as well.

Farmers are not the only ones who respond to the look of rural land. Aesthetics directs travel and recreation decisions of both rural and urban Americans. While the need for food and fiber and maintaining the family farm are key points in the argument to protect agricultural resources, the immediate value of agricultural landscapes to urban dwellers is their aesthetic appeal. Not coin-

cidentally, those states that identify open space benefits of farmland are clustered within the most heavily urbanized regions of the country: the Pacific Coast and New England. While open space can be interpreted as a surrogate for aesthetic concerns, Maine's state farmland protection law explicitly addresses scenic values.

To the 97 percent of Americans who are not farmers, the rural landscape is the primary setting for the most popular recreational activity in the country, driving for pleasure (*8*), as well as numerous other recreational pursuits. While the rural economic benefits of hunting and fishing are supported by habitat protection and creation in the Food Security Act of 1985, these activities are only part of the recreational mix that brings urban residents to rural areas. The aesthetic quality of the landscape is a fundamental component. City people don't drive to U-pick operations or roadside produce stands only to buy fruit and vegetables. They drive to the country to be in the countryside. The increasing popularity of bed-and-breakfast enterprises and recreational trails, where the public owns only a path through a privately held countryside, are further evidence of the economic development potential of rural landscapes.

A basis for aesthetic objectives

What is the aesthetic quality that farmers try to create and that we all enjoy? The easiest answer is to claim that beauty is in the eye of the beholder and conclude that aesthetics is not a policy issue. Yet ample precedents exist for federal policy on landscape aesthetics, beginning with the Highway Beautification Act in 1965 and clearly stated in the National Environmental Policy Act of 1970, which "assure[s] for all Americans aesthetically and culturally pleasing surroundings."

In fact, people have widely shared ideas about what makes landscapes beautiful. Beauty is a community-based concept (*3*), that is, people who have similar experiences (farmers or people who live in a particular region) have similar ideas of landscape beauty. We can say a lot about what makes rural landscapes beautiful if we include people who are familiar with an area in the discussion.

Three themes

My own investigations of rural Midwesterners' perceptions of landscape aesthetic quality suggest that there is ground for establishing rural aesthetic quality policy and that aesthetics may be intimately bound to larger concepts of stewardship. In projects in Illinois and Minnesota, rural residents were interviewed and asked to describe rural landscapes (*4, 5, 6, 7*). Using these in-depth interviews and content analysis of interview transcripts, aesthetic terms were derived to describe the landscapes. The aesthetic terms became the factors upon which landscapes were analyzed.

The terms used to describe what made landscapes attractive or unattractive can be summarized by three dominant themes: scenic quality, neatness, and stewardship. Each of the three themes expresses aesthetic quality, but each takes a different form in the landscape. While terms associated with traditional concepts of scenic quality, such as curved, expansive views, and picturesque, were used to describe some landscapes or landscapes at particular times, neatness terms, such as no weeds, mown, and well-kept, were used frequently. Two types of stewardship terms were frequently used: those describing naturalness, such as habitat and native, and those describing soil and water conservation, such as stripcropping and no erosion. In a Minnesota project both types of stewardship terms taken together were used with frequency about equal to that of either scenic quality or neatness terms.

The three aesthetic themes have some intrinsic differences that are important to aesthetic objectives for agricultural policy. While scenic quality largely depends upon geomorphological properties of the region, such as steep slopes and stream corridors, that a farmer does not control, neatness and stewardship depend upon the activities of the farmer. A further critical difference between neatness and stewardship is that neatness is intrinsically visible. By keeping things neat, farmers show that they work hard and take good care of their farms. Stewardship may

Rank of thematic descriptors and related aesthetic terms used by Minnesota research participants (*4*).

Thematic Descriptor	*Landscapes Sampled*	*Related Aesthetic Terms*
Scenic	307	Season, beautiful, color, curved road, expansive, hills, lakes, stream, pond, lights at night, outcrops, overlooking, peaceful, picturesque, pleasant, pretty, river valley, secluded, skyline of the city in the distance, sunset, clouds, the sky. Houses loom above, houses not far enough away from each other, houses stand out too much, houses too close together, you can see the houses, too formal, too much concrete, commercial development, too many houses or mobile homes, transmission lines.
Neatness	301	Clean, neat, put away, mown, new, no weeds, white. Cluttered, construction going on, junk, messy, weedy.
Naturalness	173	Development blends in, habitat, native vegetation, natural, trees, wildlife. Bare, flat, monotonous, no trees.
Care	152	Cared for, maintained, well-kept. Abandoned, neglected, no house on a farmstead site, not well-kept, old.
Conservation	138	Conservation, contour plowing, no erosion, pasture, stripcropping, terraces, windbreaks. All planted to corn, effluent from feedlots, poor water quality, erodible land plowed, erosion, no conservation practices being used, not a good job of farming, pastures overgrazed, plowing up the hills, runoff, slimy-looking water.
Yard care	137	Big yard, fences, flowers or shrubs, homes, landscaped, lawn ornaments or architectural details, trees in rows. No flowers, no shade, not landscaped, not mown.

not always show, especially if one does not know what to look for. While farmers who leave a few weeds in their fields or plant entire fields to perennial cover may be demonstrating care more profoundly than their neighbors who have weed-free rows of corn, their neighbors may not be able to appreciate their hard work and good care.

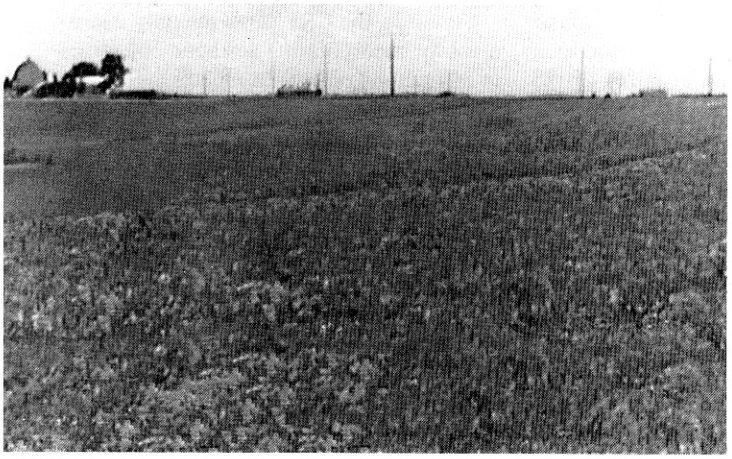
Scenic quality. Of the three themes, scenic quality will be most apparent to tourists and it relates most directly to economic development opportunities. Scenic quality often is apparent in landscapes that have a mix of land suitable for cultivation and land that farmers might describe as "not meant to be farmed," too steep, or too wet for farming. Where farming has respected limits imposed by natural features, introducing cultivation sparingly, the landscape is often scenic.

People interviewed in the Midwest described scenic beauty using such terms as curving roads, colorful leaves, expansive views, a skyline in the distance, sunsets, and being down in the valley. These terms coincide with widely shared western cultural conventions of landscape beauty. One need not live in a region to recognize this kind of aesthetic quality. At the same time, farmers interviewed recognized scenic quality in their own region and saw it as distinct from the beauty of good, productive land. Describing an Illinois nature preserve seen in a slide, one farmer said, "If one likes wilderness, that's an example of it. Let it grow like that." Another observed, "This is the type of place where people go to get away. I think of the North Woods."

Neatness. This aesthetic theme traditionally is associated with good farming. The fact that farmers have control over and responsibility for the neatness of their land

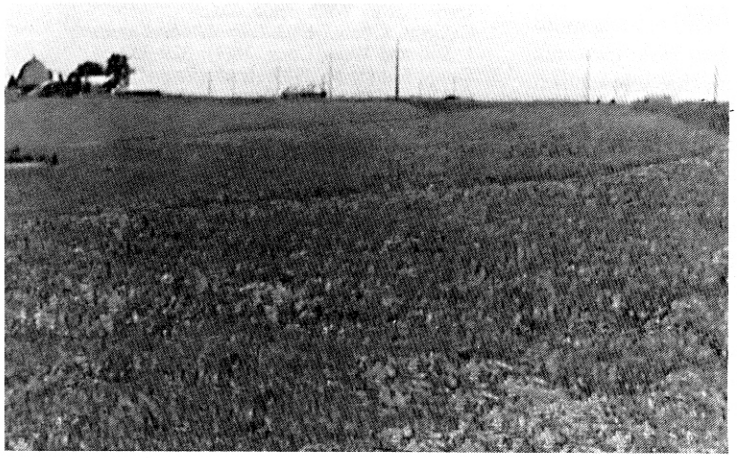
Computer-based image capture technology shows how one landscape scene, in this case a farm field in southeastern Minnesota, might look under five different land cover patterns.

Under complete cultivation, good stewardship is not immediately visible...



...with flowering plants in the seed mix, CRP cover on the same landscape would be attractive to many people...

...stripcropping would be a recognizable sign of good stewardship and local people likely would find it attractive...



...a mown filter strip with selective mowing along the roadside makes an identifable pattern of care in the CRP cover...

...strips of perennial cover could be integrated with traditional conservation practices that allow production.

helps to explain why neatness looks attractive. Neatness is an intensely human form. By keeping farmsteads and fields neat, farmers also express a concern for their neighbors and the appearance of their neighborhood. Unlike scenic quality, neatness shows what the farmer has been doing; it reflects on the farmer.

Agricultural landscapes that people described as neat were characterized by straight rows, the absence of trees, the absence of weeds, and mown roadsides. A related but not identical concept is productivity. Productive fields often were described as neat, but other landscapes, such as roadsides or farmsteads, also were attractive for their neatness. Farmsteads and rural residences described as neat are well-maintained (buildings recently painted, new or highly functional agricultural buildings); grass is mown; trees, shrubs, flowers, and often, fences and lawn ornaments are included on the site. Equipment is not left outside; any buildings not being used have been taken down. Interview participants suggested that a neat farmstead indicated that the farmland itself was well cared for.

Stewardship. This theme is like neatness; it also reflects on the farmer. However, stewardship is not always noticeable, for example, broad-base terraces. Many conservation practices demonstrate no visible control by the farmer. They may even be mistaken for neglect. No-till farming, wetland restoration, and perennial cover on CRP land are examples. In contrast, conservation practices that are immediately attractive, such as stripcropping, create bold patterns. They demand attention and inspire curiosity—and they look controlled and neat. Stripcropping can be attractive because of its massive, colorful stripes or because it looks neat, even if one does not understand why it is there.

At the same time wetlands and unmown roadsides exemplify natural areas described as attractive by some rural Midwesterners. More than one explained their preferences for natural-looking landscape features by referring to the ecological function of the features—for habitat or to the ecological aesthetic that Aldo Leopold advocated (*2*). It requires knowledge of the ecological processes represented by a landscape. A quote from an Illinois farmer looking at a slide of a natural area exemplifies the effect of knowledge: "That's pretty, but there are some dead trees. I used to dislike dead trees. It depends on if it's part of a natural process."

Implications for agricultural policy

If the CRP concept is implemented to achieve conservation, along with wildlife habitat, water quality, and soil conservation objectives, it will at the very least use the public investment in agricultural conservation more efficiently. The same trees and perennial plants installed on CRP land under the Food Security Act of 1985 also could have served the broader purpose of achieving a more attractive countryside. If CRP is implemented so that the indivdual parcels look well-maintained and stewardship is clearly visible, both their owners and anyone who travels by will realize a greater benefit. Beyond this immediate possibility, each of the aesthetic themes has policy implications that could be realized in distinct ways.

Economic incentives may be paramount in farmers' decisions to participate in the CRP, but designing CRP land to look neat supports those economic incentives. Farmers are more likely to participate in a program that enhances the look of their farms. While it may be difficult to imagine a tidy wetland or meadow, several design strategies might be used to make it obvious that such land is not neglected (*6*). For example, in West Germany, where new fencerows and roadside perennial vegetation are being introduced, landscape architects have found that including flowering plants in the seed mix enhances public appreciation of the changed landscape (*1*). Fences, signs that explain the ecological purposes being achieved and recognize the work of the landowner, and selective mowing also help to show that natural areas are not being neglected. Special attention should be given to the view from roads and highways.

The aesthetic value of good stewardship depends upon whether people can tell that they are looking at planned conservation practices. The careful design of natural looking conservation measures, such as perennial cover on CRP parcels, is only one way of making conservation obvious. Other conservation that incorporate production, such as stripcropping and terraces, are recognizable easily because of their bold patterns. A two-tiered CRP system that allows limited haying or cropping on parts of some fields could create bold, recognizable patterns. Designating patches of the most erodible land within a CRP field for perennial cover and identifying appropriate traditional conservation measures for the remainder of the field could enhance aesthetic values in some regions.

The land cover patterns that make stewardship noticeable could support biological diversity. An extensive, connected network of linear patches of perennial cover made from parts of fields would provide for greater species movement than if the same area of land were set aside in isolated, disconnected fields. In the face of global warming, linear patterns of perennial cover may provide greater geographic range for both plant and animal species. Managed for this pattern of diversity, conservation and cultivation may be compatible as well as beautiful. The dairy region of the upper Midwest and the great fallow strips of the Plains States show the potential for this kind of beauty.

The scenic quality that tourists appreciate most often is the result of farming around outstanding natural features. Land that has never been cultivated or where cultivation has been abandoned for some time is an essential part of the land cover matrix that creates scenic quality. Aesthetic conservation could be a credible rationale for rewarding "good farmers," those who did not build their crop base by cultivating steep slopes, draining wetlands, or abandoning rotations on erodible soils. Enrolling scenic land in a third tier of the CRP would recognize wise land management decisions and protect a basis for local economic development. New England rural landscapes, rolling and laced with forest cover, come to mind.

Certainly, the CRP is not the only instrument for incorporating aesthetic objectives in agricultural policy. Easements authorized under Title 13 of the Food Security Act of 1985 also have great potential for incorporating aesthetics. Farmland protection laws in several states clearly acknowledge that rural landscapes are not only used by people but also enjoyed by them. Such legislation is only pragmatic in protecting the public benefit and economic development opportunities that depend upon the look of rural landscapes.

REFERENCES CITED

1. Bruns, D., and F. Luz. 1988. *Improvement of wildlife habitat networks in agricultural landscapes: Examples from West Germany.* In *Landscape and Land Use Planning,* Am. Soc. Landscape Arch., Washington, D.C.
2. Callicott, J. Baird. 1983. *Leopold's land aesthetic.* J. Soil and Water Cons. 38(4): 329-332.
3. Eaton, Marcia M. 1989. *Aesthetics and the good life.* Associated Univ. Press, Farley Dickinson, Cranbury, N.J.
4. Nassauer, Joan Iverson. 1988. *Aesthetics of horticulture: Neatness as a form of care.* HortScience 6:23.
5. Nassauer, Joan Iverson. 1988. *Landscape care: Perceptions of local people in landscape ecology and sustainable development.* In *Landscape and Land Use Planning.* Am. Soc. Landscape Arch., Washington, D.C.
6. Nasauer, Joan Iverson. 1988. *Vernacular aesthetics and new policies for the rural landscape.* The Rural Landscape 1:2.
7. Nassauer, Joan Iverson, and Richard Westmacott. 1987. *Progressiveness among farmers as a factor in heterogeneity of farmland landscapes.* In M. G. Turner [ed.] *Landscape Heterogeneity and Disturbance.* Springer-Verlag, New York, N.Y.
8. President's Commission on American Outdoors. 1987. *Americans outdoors: The legacy, the challenge.* Island Press, Covelo, Calif. □