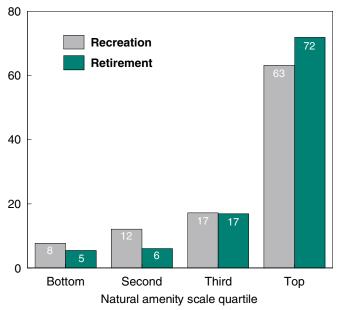
## **Recreation and Retirement Counties**

Rural counties specializing in recreation or attracting retirees have considerably higher rates of population growth than other rural counties (Beale and Johnson, 1998). For a significant number of these counties, natural amenities are probably major factors underlying their development. However, vacationers and retirees are not always drawn to areas with the same types of natural amenities. Only a third of the 282 recreation counties had enough net inmigration in 1980-90 of people age 50 and over (in 1980) to be considered one of the 191 retirement-destination counties.

According to the natural amenity index, amenities are conducive to the development of retirement and recreation counties, but not required. More than 70 percent of the retirement counties and about 63 percent of the recreation counties are among the top quarter of counties in natural amenities (fig. 6). At the same time, nearly 20 percent of the recreation counties are in the bottom half of the counties in natural amenities.

Figure 6
Distribution of rural recreation and retirement counties by level of natural amenities

## Percent of counties



But does the amenity index, validated on the basis of its ability to predict population change, completely capture the relationships between natural amenities and the development of these two county types? For each type, we repeated the analyses described, substituting recreation or retirement for population change. The natural amenities scale works as well as the individual measures in the case of retirement counties—little explanation of variance is lost (table 6). But the scale falls short by over a third in capturing the relationships between the natural amenity measures and designation as a recreation county.<sup>4</sup> The major source of the discrepancy is that recreation counties are associated more with cold winters than with warm, other things being equal.

Part of the explanation may lie in the seasonality of recreation activities in many areas. Recreation industries, which deal more with transient than permanent populations, seem more likely to dominate in areas that are seasonally attractive rather than in areas that are attractive year-round. The lake regions of Minnesota and Wisconsin, for instance, have a number of recreation (and retirement) counties even though most have low scores on the natural amenity scale. These areas have cold winters but fairly temperate summers, when vacationers are drawn to the lakes. Except for people who work in recreation industries, people and businesses moving to the periphery of the Minneapolis-St. Paul regional influence, and people (usually from the region) who retire to their vacation homes, few are attracted to these regions as permanent residents—at least compared with regions in the South and West. Cold winters thus discourage many permanent residents but, in the context of other amenities, encourage recreational visitors.

<sup>&</sup>lt;sup>4</sup> For consistency, OLS regression analysis was used here, as elsewhere. Logistic regression is more appropriate in this case, however, given that the dependent variables (recreation and retirement counties) are dichotomous--either a county is or is not one of these types. A repetition of the analysis using this alternative form of regression analysis yielded the same essential pattern of results.

Table 6-Regressions of recreation and retirement county status on amenity measures<sup>1</sup>

	Formula	Dependent variables		
Measures and results		Recreation county	Retirement county	Population change (1970-1996)
A. Standardized regression coefficients:				
Warm winter		-0.08	0.16	0.25
Winter sun		0.23	0.2	0.15
Temperate summer		0.33	0.22	0.33
Low summer humidity		0.11	0.11	0.22
Water area		0.26	0.24	0.2
Topographic variation		0.19	0.12	0.16
B. Adjusted R <sup>2</sup> :				
1 Base measures only		0.027	0.02	0.193
2 Six amenity items added to base		0.248	0.161	0.437
3 Amenity scale added to b		0.172	0.153	0.418
C. Addition to adjusted R <sup>2</sup> :				
1 Amenity measures individ	dually (B2-B1)	0.221	0.141	0.244
2 Amenity scale	(B3-B1)	0.145	0.133	0.225
3 Difference	(C1-C2)	0.076	0.008	0.019
D. Percent loss in additional variance explained when scale is used, rather than				
individual items		34.4	5.7	7.7

<sup>&</sup>lt;sup>1</sup> In addition to the amenity measures, the analyses include county economic type, high poverty, population density and its square, and the urban influence code.