

The Changing Composition and Influence of Land-Based Groups:
Evidence from Two Counties in Vermont

by

Andrew Savage, Jonathan Isham and Christopher McGrory Klyza

January 2003

MIDDLEBURY COLLEGE ECONOMICS DISCUSSION PAPER NO. 03-06



DEPARTMENT OF ECONOMICS
MIDDLEBURY COLLEGE
MIDDLEBURY, VERMONT 05753

<http://www.middlebury.edu/~econ>

**The Changing Composition and Influence of Land-Based Groups:
Evidence from Two Counties in Vermont**

Andrew Savage, Jonathan Isham, and Christopher McGrory Klyza

Middlebury College

January 2003

Submitted to

Rural Sociology

Communication should be directed to:

Christopher McGrory Klyza -- klyza@middlebury.edu

Jonathan Isham -- jiisham@middlebury.edu

Keywords: civic engagement, social capital, environmental policy

JEL Codes: Z13; Q28

The Changing Composition and Influence of Land-Based Groups: Evidence from Two Counties in Vermont

Introduction

Over the last two centuries, the structural shift from an agricultural to a service economy in the United States has not only altered what we do for a living; it has also altered the nature of our civic engagement. In northern New England, for example, few citizens still gather at Grange halls or write letters to the agricultural press as they did in the late 1800s (Judd 1997). By contrast, a relatively large number of citizens are now actively engaged in cleaning up their local watershed (Lubell et al. 2002). Our civic engagement is still fashioned by our relationship to the landscape, but the nature of this civic engagement has been transformed.

While some recent scholars of civic engagement and social capital have overlooked the rising influence of local environmental groups in the United States (Putnam 2000; Skocpol, Ganz, and Munson 2000), others have begun to document and describe this trend. Based on a comprehensive census of environmental groups in the Delmarva Peninsula and in North Carolina, Kempton et al. (2001) show that membership in environmental groups is seven to ten times higher than documented by even the best group directory. A recent household survey by Holland (2002) reveals that 18.2 percent of North Carolinians report that they are members of a group that work on environmental issues, higher than all other reported issue groups (including social justice, women's rights, Christian, and civil rights).¹

This article—an empirical and case-study analysis of the changing composition and influence of land-based groups in two counties in Vermont—was motivated by a single sentence in Robert Putnam's influential *Bowling Alone*: “The gentlest verdict on the

claim of growing grassroots environmental activism is ‘not proved’” (Putnam 2000:161). By developing a complete census of all agricultural, outdoor recreational, and environmental groups in two adjacent counties in Vermont, we can examine the changing nature of these groups and test the validity of Putnam’s claim in this part of northern New England. The article provides evidence that grassroots environmental activism has in fact grown even as traditional agricultural activity has decreased. As Vermonters’ relationship with the land has changed, their forms of land-based social capital have also changed: from bonding among land-owning farmers to bridging and linking among a wide range of private and public stakeholders.²

Our analytical strategy is as follows. We first briefly describe Vermont’s economic and social context (Section II). We define land-based groups and two other group classifications—local, state, or national groups; and autonomous groups or chapters—and then detail our census methodology (Section III). We use the census data to illustrate the changing composition of land-based groups (Section IV). We use case studies of two local environmental groups to illustrate how local environmental groups play a significant role in maintaining and building social capital (Section V). We conclude by arguing that the changing composition and influence of land-based groups is significantly affecting social capital in northern New England (Section VI).

Vermont, Land-based Groups, and Social Capital

One would rightfully expect social capital in Vermont to be as strong as just about anywhere in the United States.³ In the last 100 years, during its economic and social transition away from dependence on agriculture, Vermont has remained the most rural state in the nation. Building on its rich tradition of citizen participation in small town

government, it has the highest number of non-profit groups per capita in the United States: 3.6 per 1,000 inhabitants (Putnam 2000:292). Indeed, Vermont ranks at the top of most state-level measures of social capital (Knack 2001; Putnam 2000).

Nevertheless, in his comprehensive study of the decline of social capital in the United States, Putnam reports that “even in the tiny, civic-minded hamlets of pastoral Vermont, attendance at town meetings fell by nearly half between the early 1970s and the late 1990s” (Putnam 2000:247). As in much of Putnam’s study, the inference to be drawn from such statements seems to be clear: less activity in traditional community settings, less social capital.

While acknowledging the remarkable decline since the 1960s in most traditional social and civic groups (e.g., the Masons, the Jaycees, and the Independent Order of the Odd Fellows), we believe that the decline of social capital is not as definitive as Putnam suggests. For example, in the 1800s, agricultural and outdoor recreational groups in Vermont and the rest of northern New England played an active role in local, state, and national conservation policy making (Judd 1997). In the last half of the 1900s, agricultural groups have grown much less influential as the number of Vermonters engaged in agriculture declined.⁴ But rather than becoming disengaged from social and civic activity, we think that Vermonters are investing in new forms of social capital building: joining and participating in new environmental groups—what we call the greening of social capital.

In many ways, Vermont provides the most fertile possible soil for the growth of local environmental groups. In addition to being a national leader in participatory local government and nonprofit activity, Vermont is also recognized as a leader in protecting the environment. In the Institute for Southern Studies “Gold and Green” indices of

economic and environmental performance, Vermont ranked first on the green scale in both 1994 and 2000 (Institute for Southern Studies 2000). The *1991-1992 Green Index* ranked Vermont third in the nation (Lester 1994).

Accordingly, it comes as no surprise that Vermont has many effective state-based environmental groups—mostly based in Montpelier (the state capital) or Burlington (the largest city in the state)—that are significantly affecting state-level environmental policy (VNRC 2000). But most of these groups, which have paid staff and memberships in the thousands, can in fact be characterized as tertiary groups with members mainly based on “checkbook affiliation” (Putnam 2000:158). We note that, due to Vermont’s relatively small population (approximately 613,000, the second smallest in the United States) and geographic size, this characterization could be challenged: it is likely that these state-based groups do contribute to the generation of social capital in Vermont (Kimberly (2002); Wollebaek and Selle (2002)). Nevertheless, in the analysis that follows, such groups will be treated separately from the local land-based groups. We do this in order to emphasize the rise of active local environmental groups.

Research Methodology

Our census of land-based groups was conducted in Addison and Washington Counties. We selected Addison County, which has 23 rural towns and a population of 36,000, because of our previous research in the area and its geographic proximity. We selected Washington County, which has 19 towns and a population of 58,000, because it consists of both rural regions and a more densely populated area: it includes the state capital Montpelier and the adjacent city of Barre, which together comprise the third largest urban area in the state. Addison County, which includes the central part of the

Champlain Valley on the shore of Lake Champlain, has rich soils that are ideal for agriculture. Washington County, which includes the central part of the Green Mountains, has a well developed skiing and recreationally oriented tourist industry. All told, the 42 towns in these two counties give a representative snapshot of the ecological and cultural contours of Vermont's 249 towns in 15 counties (Klyza and Trombulak 1999).

Group Classifications and Definitions

The focus of this article is land-based groups, which comprise three types of subgroups: agricultural groups, outdoor recreational groups, and environmental groups.

- An agricultural group is a self-named, voluntary collection of people (or member organizations) whose lives and livelihoods are directly connected to agriculture, farming, and farm animals.

Such groups typically focus on advocating political goals of farmers (e.g., chapters of the Grange and of the Farm Bureau) or on social and civic activities related to farming (e.g., chapters of the Grange and 4-H groups).

- An outdoor recreational group is a self-named, voluntary collection of people (or member organizations) who partake in a common set of recreational activities in the outdoor landscape.

The recreation must take place in a natural as opposed to human-made environment.

Hence, a group of mountain bikers would fall into this category, a group of road bikers would not; a snowmobile club would count as an outdoor recreational group, a soccer club would not.

- An environmental group, adopting the definition of Kempton et al. (2001:561), "is a self-named, voluntary collection of people (or member organizations) who agree on some part of a view of the ethical or appropriate relationship between humans

and the world around them, who communicate with each other about this topic, and who perform action in a particular venue in order to advance their view of it.”

Land-based groups, which focus on ethical, political, recreational, and social activities directly related to human interactions with the landscape, do not include trade associations or other groups focused primarily on an economic relationship to the land.

A second classification distinguishes local and non-local groups:

- A local group, again following Kempton et al. (2001:561), is based on “the social criteria of communication, direct participation, and shared venue, which typically but not necessarily imply geographical proximity of members.”⁵
- A non-local group is based on the political criteria of state, regional, national, or international boundaries, which typically but not necessarily imply geographical distance of members.

Our census includes all local land-based groups in Addison and Washington Counties and (as detailed below) four kinds of non-local groups: state-, regional-, national-, and international-level groups. For example, Forest Watch is a state-level group based in Montpelier that is dedicated to protecting Vermont’s wilderness; the ElectroMagnetic Radiation Network is an international-level group based in Marshfield, Washington County that is dedicated to lowering exposure to electromagnetic radiation throughout the world.

Among local and non-local groups, a third classification distinguishes autonomous groups and chapters.

- An autonomous group is a self-formed and self-governed group that, though it may be part of larger networks or coalitions, is not subject to the formal by-laws of a non-local group.

- A chapter is typically but not necessarily a self-formed and self-governed group that, in addition to possibly being part of larger networks or coalitions, is subject to the formal by-laws of a non-local group of which it is a branch.

For example, the Watershed Center, which is dedicated to increasing land conservation and improving water quality in the town of Bristol, is an autonomous local group.⁶ The Ducks Unlimited chapter of Vermont, which is headquartered in Bristol, is a state-level national chapter.

The Creation of the Group Census

In order to analyze the changing composition of land-based groups, we collected data on the history, membership, and objectives of every land-based group in these two counties.⁷ As we began, we compiled all available sources at our disposal from previous research (Isham and Polubinski 2002; Klyza and Trombulak 1999; Savage, Isham, and Klyza 2002), our classroom teaching, and our personal knowledge of these two counties. These sources included group directories (the *Vermont Environmental Directory* (VNRC 2000) and the *Vermont Grassroots Directory* (VPJC 2002)), local newspaper articles and weekly calendars, websites, and the local telephone book. The directories listed many non-local land-based groups; however (as detailed below) they failed to include most local environmental groups. Newspaper articles and calendars often provided names of active groups.⁸ Websites included many comprehensive lists of groups (such as local watershed groups and the chapters of the Vermont State Grange). The local telephone book contained few local groups.

We then conducted phone interviews with group leaders, our primary source of information, in order to: verify whether the group was a land-based group; classify each land-based group; and gather specific information about each land-based group.⁹ This

included the founding date, mission and activities, current membership numbers, current core membership numbers, operating budget, extent of political activity, and local partnerships (with other groups and institutions).¹⁰

We quickly realized that we would need to adopt consistent data recording standards when group leaders gave incomplete or indefinite responses. When a range of dates was given for the founding date, the mean date was entered into our database (in very few cases, founding dates were unavailable). When a range was given for membership or core membership (which occurred frequently), we chose the smaller number; this yields an underestimate of membership and core membership. For state-, national- and international-based groups, we used the number of board directors as the number of core members. For groups that are federations of other groups—for example, the Northern Forest Alliance—we used the number of board directors as the number of core members and the number of total members. For school groups, we used the number of officers as the number of core members. Based on our personal experiences, we believe that these standards again underestimate the number of members and core members in these types of groups.

To expand our group list, we asked each group leader whether he or she knew of other land-based groups in the county. As we began the census, this question often produced several new groups that we would then investigate. As we completed the census, we also called or visited each town clerk in Addison County and asked whether he or she knew of any additional groups; this exercise did not yield many additional groups.¹¹

When we were satisfied that we were close to a complete census, we then compared our list to the Vermont Secretary of State's database on active and inactive registered

non-profits. The database produced a new list of possibly active groups in each county. For each of these, we determined whether the group was still active and, if so, then interviewed a group leader. This process yielded seven land-based groups that we had previously missed: for example, the Duxbury Land Trust (with ten core members and 50 total members), was not in the group directories, listed on the website titled “The Land Trusts of Vermont,” or mentioned by the leaders of other groups with whom we had spoken. Finally, we compared our revised list to all Vermont “401(3)c’s” listed in the Business Master Files of the Internal Revenue Service (IRS), which yielded ten additional land-based groups that we had previously missed.

As we completed the census, a group was removed from the list if we were unable to contact a group leader by phone after a minimum of two phone calls and we were unsure of a group’s existence through other means. When we could not contact anyone in a group that we knew existed, we gave the group zero membership (following Kempton et al. (2001)), another standard that leads to an underestimation of membership.

The Changing Composition of Land-based Groups

In this section, we address four questions related to the composition of land-based groups in these two counties. How well do publicly available lists take account of local and non-local land-based groups? How are autonomous groups and chapters distributed among agricultural, outdoor recreational, and environmental groups? How does the founding year differ among agricultural, outdoor recreational, and environmental groups? What is the current core and total membership among agricultural, outdoor recreational, and environmental groups? Collectively, these questions allow us to detail the changing composition of land-based groups in these counties over the last 35 years.

Publicly-available Lists of Land-based Groups

As explained in the methodology section, we used databases from the Vermont Secretary of State, the IRS, and two published directories to help create our census. As illustrated in Table 1, none of these publicly available sources comes close to fully capturing the extent of local land-based groups in Vermont. The best source, the Secretary of State's list of registered non-profits, listed just 32 of the 95 local land-based groups in Addison County and 40 of the 90 local groups in Washington County. By contrast, the Secretary of State's list is much more comprehensive for non-local groups: it included six of the eight non-local groups in Addison County, and 32 of the 44 non-local groups in Washington County. All told, 61 of the 95 local groups in Addison County are not listed in any of the publicly available sources; 53 of the 90 local groups in Washington County are not so listed. By contrast, all but five of the non-local groups across the two counties are listed in at least one of the publicly available directories.

Table 1 about here.

This table, therefore, illustrates the systematic undercounting of local land-based groups by the best publicly available sources. One would have expected to find large non-local environmental groups that are actively soliciting tax-deductible donations in the official public lists: these include, for example, the Northern Forest Alliance, the Vermont Natural Resources Council, and the state chapter of the Nature Conservancy. Local groups, however, are infrequently listed: these include groups as diverse as 4-H chapters, the Route 2 Citizen's Alliance, and the Friends of the Northfield Range. Without systematic prodding within each community, the majority of local land-based groups—and their influence in their communities and beyond—can easily go unnoticed.¹²

The Distribution of Autonomous Land-based Groups and Chapters

Table 2 illustrates the distribution of all 237 land-based in our census, based on the classifications presented in the previous section. The top half of the table shows that Addison County currently has 103 land-based groups. Thirty-four of the local agricultural groups are chapters: these include 27 chapters of the 4-H and six chapters of the Grange. Only nine of the 19 local outdoor recreational groups, by contrast, are chapters: eight of these are town-level snowmobile clubs, organized in the state under the Vermont Association of Snow Travelers (VAST). The ten local autonomous outdoor recreational groups include groups as diverse as the Silver Streakers Biking Group and the Addison County Trail Blazers of all-terrain vehicle riders.

The contrast between autonomous group and chapters is even more striking among the 41 local environmental groups in Addison County: only six of these are chapters, including the Otter Creek Audubon Society (see Section V). The 35 local autonomous environmental groups include groups as diverse as the Lewis Creek Association (see Section V), the Lake Dunmore/Fern Lake Association, and seven conservation commissions.

Finally, Addison County has eight non-local groups: among these are four autonomous environmental groups (including Ecologia, which is an international-level group dedicated to supporting environmentally-oriented civic engagement) and two environmental chapters (including the Federated Garden Clubs of Vermont.)

Table 2 about here .

The second half of Table 2 shows that Washington County, with 134 land-based groups, has a similar distribution among local groups. Fifteen of the 18 local agricultural groups are chapters, 15 of the 31 local outdoor recreational groups are chapters, but only

nine of the 41 local environmental groups are chapters. The 32 local autonomous environmental groups in Washington County include, for example, the Friends of the Mad River Valley, the Capital Area Land Trust, and eight conservation commissions. In addition, 44 non-local groups are located in Washington County (35 of which are based in Montpelier). Thirty-seven are environmental groups, including state-level chapters such as the Vermont Land Trust and the Nature Conservancy of Vermont, and autonomous national-level groups such as the Noise Pollution Clearing House.

This table, therefore, illustrates that local environmental groups—in stark contrast to local agricultural groups—tend to be autonomous groups, not chapters. In addition, almost all non-local groups (which are primarily autonomous) are environmental groups.

The History and Size of Land-based Groups

Table 3 details the founding dates and membership patterns of groups in our census. In this sub-section, we first draw attention to notable founding and membership trends among each type of local land-based group: agricultural, outdoor recreational, and environmental. We then consider the trends among the non-local groups.

Table 3 about here.

Local agricultural groups. The founding dates of existing agricultural groups are fairly evenly distributed across three distinct time periods—pre-1970, 1970-1985, and post 1985—but the distribution within this category is quite uneven. Thirteen of the 23 local agricultural groups founded in the two counties before 1970 are Grange chapters, and another seven are 4-H chapters. By contrast, 20 of the 21 local agricultural groups founded in the two counties since 1985 are 4-H chapters. According to this census, the 4-H, whose mission is “to enable young people to acquire knowledge, develop life skills and form attitudes that enable them to become self-directing, productive, and contributing

members of society” (National 4-Headquarters 2002), has remained vibrant in these two counties.

This is confirmed by examining membership patterns among local agricultural groups. Of the 488 core members of local agricultural groups in Addison County, 389 are 4-H leaders and youth members; of the 1,288 total members, 589 are in the 4-H. The trend is less prominent in Washington County: 127 of the 241 comparable core members are 4-H leaders and youth members, as are 191 of the 757 total comparable members. (Given the relative prominence of dairy farming in Addison County, this difference is not unexpected.)

Local outdoor recreational groups. The founding dates of existing local outdoor recreational groups are also fairly evenly distributed across the same three time periods, but among these groups the distribution is also quite uneven. Fourteen of the 18 local outdoor recreational groups founded in the two counties between 1970 and 1985 are chapters of VAST. This wave of founding of these snowmobile chapters can be directly attributed to state legislation passed in the early 1980s, which requires all snowmobile riders in Vermont to belong to VAST and to a local club to ride legally in the state. Currently, the 21 VAST chapters in our census include 272 core members and 3,922 total members.

By contrast, only one of the 17 current local outdoor recreational groups founded since 1985 is a VAST chapter. The other 16 groups include fishing, mountain biking, sailing, skiing, and trail running clubs. Currently, the 23 local outdoor recreational groups that are not VAST chapters include 492 core members and 3,676 total members, which include 282 core members and 1,706 total members of the 16 groups founded since 1985.

We believe that this trend—a rise in non-snowmobile oriented local outdoor recreational groups since 1985—is an important part of the greening of social capital that we document in this paper, since participation in such outdoor recreational activities is likely to be associated with pro-environmental behavior (Theodori, Luloff, and Willits 1998).

Local environmental groups. The founding dates of existing local environmental groups are very skewed across the three-documented time periods. Of the 80 local environmental groups in our census, only six were founded before 1970, while 61 were founded since 1985. Within this category, there is also a marked contrast between the founding dates of autonomous groups and chapters. Among the 19 groups founded prior to 1985, 11 were local chapters of state or national groups (these include two local chapters of the Audubon Society, two Green Mountain Club chapters, and two chapters of Duck Unlimited). Among the 61 groups founded since 1985, only four are chapters (all of which are chapters of Keeping Track, a relatively new state-based wildlife group). And among the 995 core members and 5,990 total members in local environmental groups in these two counties, 669 and 4,103 are, respectively, in groups that were founded since 1985.

These results are the empirical punch line of this paper: since the mid 1980s, the number and membership roles of local autonomous environmental groups has skyrocketed relative to local agricultural and outdoor recreational groups. Figure 1 illustrates the striking nature of this trend. We believe that, for these two representative counties in Vermont, this provides the empirical evidence that Putnam felt was lacking in the United States (2000): “grassroots environmental activism” has indeed been rapidly growing in this part of the United States over the last 20 years.

Figure 1 about here.

Non-local groups. As shown in the remaining sections of Table 3, only eight non-local agricultural and outdoor recreational groups are based in these two counties. The two most prominent are VAST, which oversees the network of local snowmobile chapters, and Rural Vermont, an agricultural and rural advocacy group with 3000 statewide members.

By contrast, 41 non-local environmental groups are located in these counties, 25 of which have been founded since 1985. As illustrated by Figure 2, there has also been a rapid rise of non-local environmental groups relative to non-local agricultural and outdoor recreational groups.

Figure 2 about here.

Membership patterns in non-local environmental groups have a very different time trend than membership patterns in local environmental groups. Among the 524 core members and 59,424 total members of all non-local environmental groups, 235 and 52,457 are, respectively, in the 16 groups that were founded before 1985. The most prominent state-level groups—the Vermont Public Interest Research Group (20,000 members), the Nature Conservancy of Vermont (7,500 members), and the Vermont Land Trust (7,500) members—have built up their membership base over more than 30 years.

In many ways, this emphasizes the different nature of membership in these non-local groups. We agree with Putnam (2000) that membership in these direct-mail organizations is not a measure of social capital; the relative popularity of the older state-level groups is more an indication of their ability to rally sustained political support for environmental causes.

We conclude this section with a conceptual and empirical caveat. Our census comprises existing groups in Addison and Washington Counties, as of the summer of 2002. Since our data do not account for groups that no longer exist, we cannot fully assess the extended or recent history of the changing composition of land-based groups. First, we do not have information about historically prominent agricultural groups founded before 1970 that no longer exist; many local Grange chapters would fit this characterization. Second, we do not have information about any prominent former land-based groups founded after 1970 that no longer exist; this might include NIMBY or other kinds of environmental groups that were formed to deal with specific local environmental issues. Finally, we cannot compare the changing composition of land-based groups to all types of groups in these two counties (e.g., the Masons, the Jaycees, and the Independent Order of the Odd Fellows). Our future research plans are to census all groups in the history of these counties, thereby allowing us to address some of these critical historical questions.

The Changing Influence of Land-based Groups

As documented in the previous section, the changes in the membership base of land-based groups suggest that the influence of local environmental groups has grown substantially. This section summarizes the recent histories of the Otter Creek Audubon Society (OCAS) and the Lewis Creek Association (LCA), and then details the nature of their influence, using the classifications of bonding, bridging, and linking social capital.

The OCAS, a local chapter of the National Audubon Society, was founded in 1971, during the early stages of the modern environmental movement. Addison County citizens

who believed in the mission of the National Audubon Society and in community-based involvement formed the OCAS. Its mission reflects social and civic interests: “to protect, enhance, and celebrate all elements of the precious and irreplaceable natural environment” (OCAS Home 2001). Some citizens join because of their interest in bird watching; others join to support and participate in the group’s advocacy and conservation efforts.

The OCAS partially fits Putnam’s idea of “mail-order membership” of environmental groups. The National Audubon Society has a large influence over the membership of this local chapter. Addison County citizens who mail a check to the National Audubon Society automatically become members of the local chapter; many of these citizens choose to mail a check to support national advocacy efforts and to receive the Audubon magazine. As of June 2001, OCAS had 208 members in Addison County; membership has remained consistently around 200 for the 1990s (the group does not have data before 1990). The one exception was a very effective national and state solicitation campaign in 1996 that caused a tripling in membership. Soon after, however, membership declined back to pre-solicitation levels.

Yet the core members of the OCAS are by no means mail order participants. The leaders of the group estimate that the chapter has about 25 very active members. One group leader explains that OCAS “has changed a whole lot,” gradually concentrating more emphasis on environmental protection and political advocacy. While field trips and programs remain focused on enjoying the natural world, “there is a lot more activism involved today” (Fenn 2002).

The LCA, an autonomous local group founded in 1990, is defined by the watershed of the Lewis Creek in Vermont’s northern Addison and southern Chittenden Counties.

Citizens of this watershed started this group after “looking into the country, seeing the impacts of development and [becoming] obsessed about what to do” (Illick 2001). Its mission is to “engag[e] citizens to improve water quality, conserve biological integrity, and promote land use planning for sustainable rural communities” (Lewis Creek Association 2000). The pursuit of this goal requires active citizen participation.

Of the 1,700 residences in the Lewis Creek watershed, approximately 40 percent are included on LCA’s mailing list. In 2000, 171 residences (including 240 individual names)—just over 10 percent of the watershed’s population—donated money to LCA. The recent growth in giving comes, in part, from LCA’s increasingly strong presence in the watershed’s communities.

The Kingfisher, LCA’s annual newsletter, makes the important distinction between those 240 individuals who contribute “dues” versus those who supply “do’s.” Recently, the LCA began to record the number of volunteers who contribute their time each year to various volunteer activities. From September 1999 to September 2000, 180 volunteers participated in LCA programs. This number actually underestimates local participation, because it does not include school-based volunteerism and many members who attended LCA workshops and meetings. In this watershed community, these volunteers have produced a dense social network.

Bonding Social Capital

Bonding social capital refers to relations among family members, close friends, and neighbors (Woolcock 2002). Both groups generate bonding social capital through volunteer activities, public events, and specific conservation programs.

The OCAS has formalized many activities that serve to connect its membership while pursuing its mission. For example, between five and 30 people usually attend each of the

eight annual field trips (King 2002). In the spring of 2001, OCAS organized presentations such as “Sights and Sounds of a Spring Night” and “Nesting Birds of Vermont”; a discussion about organic farming; the Clayplain Forest Wildflower Walk; and the Youth Streamside Restoration Project (OCAS Programs and Events 2001). In addition, OCAS organizes annual events such as the Christmas Bird Count, a Birdathon fundraiser, an annual dinner, and its annual meeting. All of these events promote face-to-face participation of OCAS members and the local community. In fact, the activities of the OCAS do more than bond many like-minded (bird-loving or advocacy-seeking) community members in group settings; members frequently interact socially outside of the group.

Likewise, the many formal activities of the LCA—including frequent watershed restoration projects—bond community members such as adult volunteers, scouts, members of 4-H clubs, and primary school, secondary school, and college students. In 1999, for example, 40 community volunteers and 200 elementary school students planted 700 trees and shrubs along the Starksboro section of the Lewis Creek (Along the River 2000). Local college faculty, professionals in the scientific community and state agencies, and a dozen LCA volunteers regularly monitor water quality. Furthermore, about 50 LCA members participate in annual wildlife tracking activities.

The LCA is clearly one of the local “vehicles of widespread citizen participation and activism” (Dann 2000:208). Through its initiatives, this local environmental group creates community-based activities that give citizens the opportunity for actual community-building involvement and social interaction. And like the OCAS, the connections made within the LCA extend beyond the group and into the community:

“you frequently see [the LCA volunteers] in the grocery store, in the post office, and in the school” (Runcie 2001).

Bridging and Linking Social Capital

Bridging social capital refers to relations among more distant associates and colleagues who share broadly similar demographic characteristics irrespective of how well they know one another (Woolcock 2002). The bridging partnerships formed by the OCAS and the LCA are critical to the successful pursuit of activities like water quality monitoring, land conservation projects, and wildlife tracking. The two groups formed the Addison County River Watch Collaborative with the New Haven River Anglers Association and the Watershed Center, uniting these four local land-based groups to better coordinate water-monitoring programs in Addison County (Addison County River Watch Collaborative 2000). In addition, OCAS works with the Middlebury Area Land Trust on projects such as its Green Belt initiative, a 20-year old conservation project along the Otter Creek. OCAS also frequently works with groups like Vermont Family Forests (VFF) and the Middlebury Natural Foods Coop, while LCA collaborates with VFF as well as the Hinesburg Land Trust and Charlotte Land Trust for conservation projects.

Linking social capital refers to alliances with sympathetic individuals in positions of power (Woolcock 2002). Both groups link with statewide groups like the Vermont Rivers Conservancy, Keeping Track, and the Vermont Land Trust and with government agencies like the Vermont Fish and Wildlife and Forest, Parks, and Recreation Departments.

Overall, the activities of the OCAS and the LCA foster the growth of social networks and norms through bridging and linking among the leaders and members of many land-based groups and other citizens throughout Vermont.

The Influence of Local Land-based Groups

These two local land-based groups (which are further detailed in Savage, Isham, and Klyza (2002)) are representative of two types of influential groups in these counties: older local chapters and newer autonomous groups. Like most land-based local groups, LCA and OCAS rely on both passive and active members for support. The passive members assist these groups financially; the active members generate local norms and networks related to the conservation of the local landscape.¹³

We believe that the recent histories of these Addison County groups are representative of the changing influence of the hundreds of similar local land-based groups that have been founded in Vermont in the last 35 years.¹⁴ Groups like the OCAS and the LCA are playing a major role in shaping environmental and political outcomes—and fostering bonding, bridging, and linking within and outside of their communities. In our future research, we will systematically assess the influence of all local and non-local land-based groups in these two counties.

Conclusion

This article, in which we document the changing composition and influence of land-based groups in two counties in Vermont, has three major results. The empirical results in Section III suggest how the existence of many local environmental groups is easily missed. They also demonstrate the changing nature of local land-based groups in Addison and Washington Counties: since the mid-1980s, the number and membership roles of

local autonomous environmental groups have skyrocketed relative to all other types of local and non-local land-based groups in these counties. The case study results in Section V show how local environmental groups play a significant role in maintaining and building social capital: members are significantly involved within their communities and in various bonding, bridging, and linking activities.

These results help illustrate several stories. First, the existence of so many (unlisted) local environmental groups may undermine some of Putnam's claims about the decline of social capital in the United States. If such findings are found elsewhere in the nation—as they have been in the Delmarva Peninsula and in North Carolina (Holland 2002; Kempton et al. 2001)—one may conclude that, throughout the nation, citizens who formerly joined the Rotary and the Kiwanis Clubs are now joining local environmental groups.¹⁵

Second, agricultural groups are clearly in decline. This decline in Vermont, a mature agricultural region, may foreshadow similar declines in other agricultural and rural parts of the nation.¹⁶ The decline also underlines the changing ways in which humans relate to the landscape. As recently as 30 years ago, the dominant land-based groups were agricultural; today, environmental groups dominate. Such changes echo the larger economic shifts and changing values among the United States population (Dunlap 1992; Inglehart 1990).

Finally, our results contribute to the very important ongoing conversation on civic engagement in the United States (Putnam 2000; Skocpol and Fiorina 1999). Like many other scholars across the disciplines, we believe that this conversation is central to the future of the nation: for determining how policy is made and for maintaining and enhancing the health of our democratic system.

Most studies of environmental policy focus on the role of national and state institutions and groups. Yet in the last two decades, local environmental groups have played an increasingly important role in diverse areas such as water monitoring and wildlife habitat identification, the purchase of land and conservation easements, and the prevention of the location of unwanted environmental harms in communities (sometimes derogatively referred to as NIMBYism) (Gottlieb 1993; Press 2002; *Wild Earth* 2001-2002).

As national- and (increasingly) state-level politics becomes professionalized and the purview of big money, citizens are increasingly turning to local groups to engage in democratic politics. Democratic theorist John Dryzek points to public spheres in civil society as one of the few places where democracy, faced with the constraints of economic rationality and the international system, can expand today (1996). The empirical and case study evidence presented in this article sheds light on the role of local land-based groups in this process.

TABLES AND FIGURES

Table 1: Publicly-available Lists of Land-Based Groups in Addison and Washington Counties

		<i>Local</i>					<i>Non-local</i>				
		<i>All</i>	<i>Not listed</i>	<i>Listed</i>			<i>All</i>	<i>Not listed</i>	<i>Listed</i>		
				<u>Secretary of State</u>	<u>IRS</u>	<u>Directories</u>			<u>Secretary of State</u>	<u>IRS</u>	<u>Directories</u>
ADDISON COUNTY		-	-				-	-			
	<i>All</i>	95	61	32	15	7	8	0	6	5	4
	<u>Agricultural</u>	35	27	8	1	0	1	0	1	1	0
	<u>Outdoor recreational</u>	19	12	7	1	0	1	0	1	0	0
	<u>Environmental</u>	41	22	17	13	7	6	0	4	4	4
WASHINGTON COUNTY											
	<i>All</i>	90	48	40	6	4	44	5	32	22	30
	<u>Agricultural</u>	18	9	9	1	0	5	1	4	2	2
	<u>Outdoor recreational</u>	31	11	20	1	0	2	0	2	1	0
	<u>Environmental</u>	41	28	11	4	4	37	4	26	19	28

Notes: See text for definitions of classifications

Table 2: Distribution of Land-based Groups in Addison and Washington Counties

	<i>All</i>	<i>Local</i>		<i>Non-local</i>		
		<i>Autonomous</i>	<i>Chapter</i>	<i>Autonomous</i>	<i>Chapter</i>	
ADDISON COUNTY						
<i>All</i>	103	46	49	6	2	
<i>Agricultural</i>	36	1	34	1	0	
<i>Outdoor recreational</i>	20	10	9	1	0	
<i>Environmental</i>	47	35	6	4	2	
WASHINGTON COUNTY						
<i>All</i>	134	-	51	-	34	10
<i>Agricultural</i>	23		3		4	1
<i>Outdoor recreational</i>	33		16		2	0
<i>Environmental</i>	78		32		28	9

Notes: See text for definitions of classifications

Table 3: The Changing Composition of Land-based Groups in Addison and Washington Counties

	<i>Founding year</i>			<i>Membership</i>			
	<i>Pre-1970</i>	<i>1970-1985</i>	<i>Post-1985</i>	<i>Total core members</i>	<i>Median Core Members</i>	<i>Total members</i>	<i>Median members</i>
ADDISON COUNTY							
<i>Local</i> <u><i>Agricultural</i></u>	15	6	14	488	15	1288	23
<u><i>Outdoor recreational</i></u>	3	7	9	200	9	1570	20
<u><i>Environmental</i></u>	2	8	31	540	7	2524	50
<i>Non-local</i> <u><i>Agricultural</i></u>	1	0	0	-	-	-	-
<u><i>Outdoor recreational</i></u>	0	0	1	6	6	6	6
<u><i>Environmental</i></u>	2	0	4	87	8.5	4571	29
WASHINGTON COUNTY							
<i>Local</i> <u><i>Agricultural</i></u>	8	3	7	241	15	757	23
<u><i>Outdoor recreational</i></u>	6	11	8	567	13.5	6031	130
<u><i>Environmental</i></u>	4	5	30	455	10	3466	11
<i>Non-local</i> <u><i>Agricultural</i></u>	1	0	4	87	16	3089	17
<u><i>Outdoor recreational</i></u>	1	0	0	20	20	20	20
<u><i>Environmental</i></u>	4	10	21	447	12	54853	24.5

Notes: See text for definitions of classifications

Figure 1: The founding dates of local land-based groups: Addison and Washington Counties

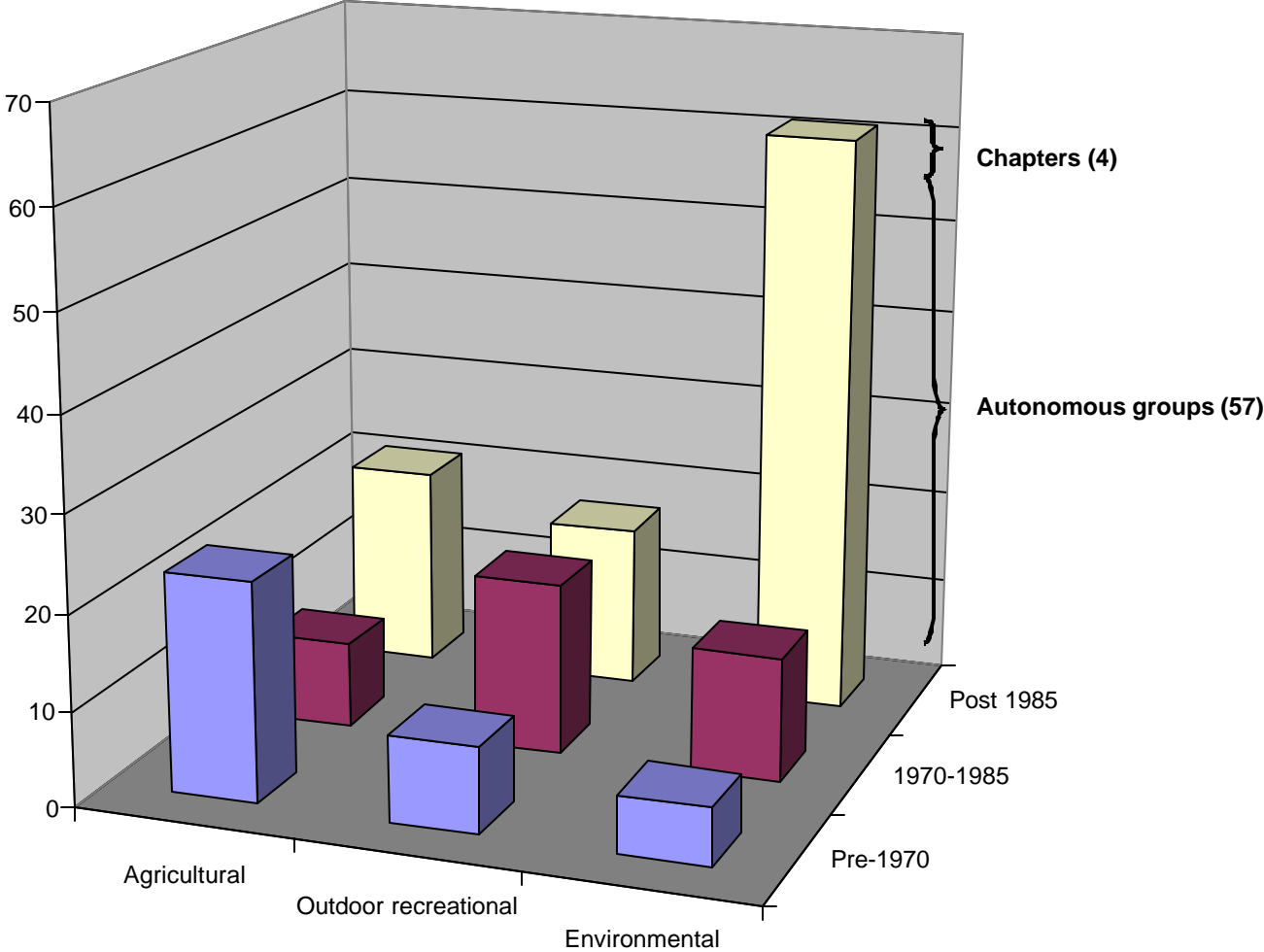
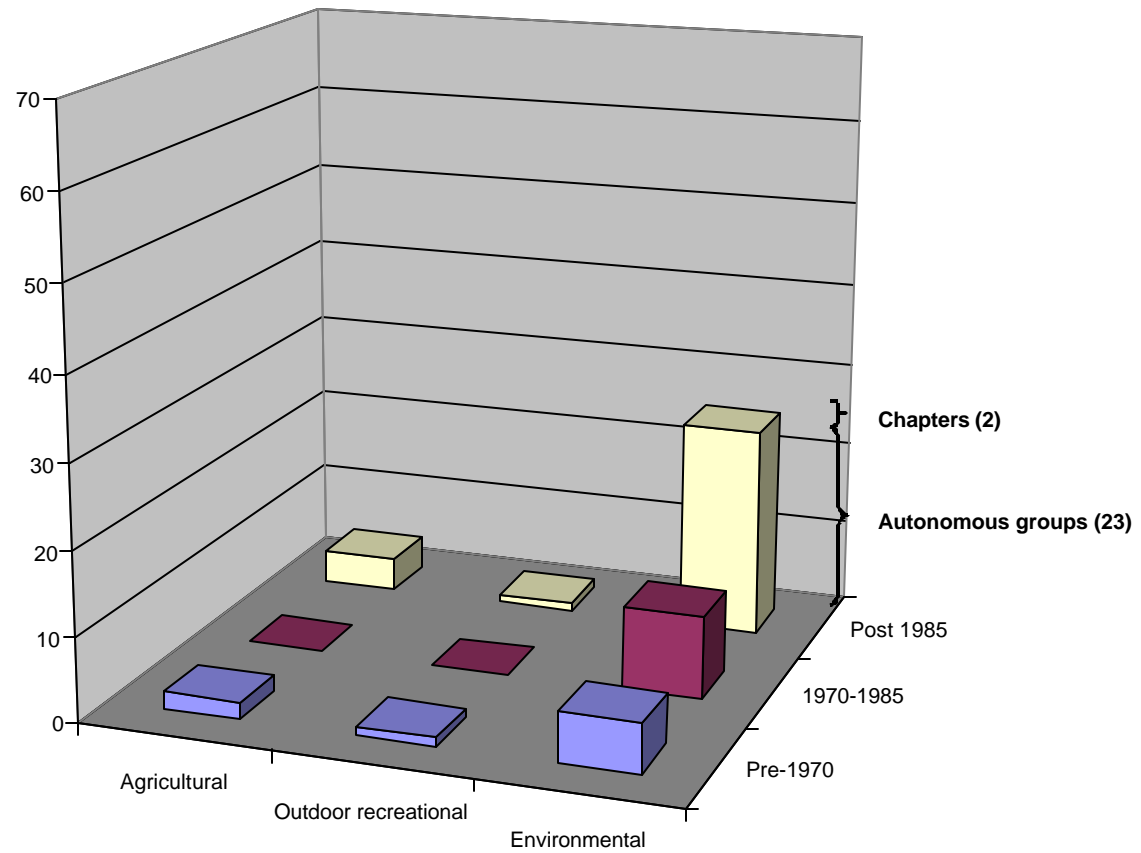


Figure 2: The founding dates of non-local land-based groups: Addison and Washington Counties



References

- Addison County River Watch Collaborative. 2000. "Citizen Water Quality Monitoring Program: 2000 Final Report."
- "Along the River." 2000. *The Kingfisher* 8 (November), p. 1.
- Associated Press. 2000. "Agriculture's Impact Recedes at VT State Fair." *Addison Eagle*, September 7, p. 11.
- Barron, H.S. 1984. *Those Who Stayed Behind: Rural Society in Nineteenth-Century New England*. New York: Cambridge University Press.
- Castle, E.N. 2002. "Social Capital: An Interdisciplinary Concept." *Rural Sociology* 67: 331-49.
- Dann, K. 2000. *Lewis Creek Lost and Found*. Hanover, NH: University Press of New England.
- Dryzek, J.S. 1996. *Democracy in Capitalist Times: Ideals, Limits, and Struggles*. New York: Oxford University Press.
- Dunlap, R.E. 1992. "Trends in Public Opinion Toward Environmental Issues: 1965-1990." Pp. 89-116 in *American Environmentalism*, edited by R.E. Dunlap and A.G. Mertig. Philadelphia: Taylor and Francis.
- Ervin, J. 2002. "Community-based Conservation Planning at a Watershed Scale: Three Vermont Case Studies and Their Implications for Planning Theory." PhD dissertation, College of Natural Resources, University of Vermont.
- Fenn, A. 2001. Member and former president, OCAS, interview. October 2.
- Gottlieb, R. 1993. *Forcing the Spring: The Transformation of the American Environmental Movement*. Washington: Island Press.

- Grønberg, K. and L. Paarlberg. 2001. "Community Variations in the Size and Scope of the Nonprofit Sector: Theory and Preliminary Findings." *Nonprofit and Voluntary Sector Quarterly* 30:684-706.
- Holland, D. 2002. "Not-for-Profit Visions of the Public Good: Activism and Democracy in North Carolina." Department of Anthropology. University of North Carolina, Chapel Hill. Unpublished manuscript.
- Illick, M. 2001. LCA director, interviews. October 11 and December 15.
- Inglehart, R. 1990. *Culture Shift in Advanced Industrial Society*. Princeton, NJ: Princeton University Press.
- Institute for Southern Studies. 2002. "Gold and Green 2000." Retrieved August 6, 2002. (<http://www.southernstudies.org/>).
- Isham, J. and J. Polubinski. 2002. "Killington Mountain Resort: A Case Study of 'Green' Expansion in Vermont." *Vermont Law Review* (forthcoming).
- Judd, R.W. 1997. *Common Lands, Common People: The Origins of Conservation in Northern New England*. Cambridge, MA: Harvard University Press.
- Kempton, W., D.C. Holland, K. Bunting-Howarth, E. Hannan, and C. Payne. 2001. "Local Environmental Groups: A Systematic Enumeration in Two Geographical Areas." *Rural Sociology* 66:557-578.
- Kimberly, G. 2002. "2002 Portrait of Vermont's Charitable Sector." Vermont Alliance of Nonprofit Organizations, Burlington, VT. Unpublished manuscript.
- King, W. 2001. OCAS president, interview. September 25.
- Klyza, C.M. and S.C. Trombulak. 1999. *The Story of Vermont: A Natural and Cultural History*. Hanover, NH: University Press of New England.

- Knack, S. 2001. "Social Capital and the Quality of Government: Evidence from the U.S. States." The World Bank, Washington. Unpublished manuscript.
- Lester, J.P. 1994. "A New Federalism? Environmental Policy in the States." Pp. 51-68 in *Environmental Policy in the 1990s*, 2d ed., edited by N.J. Vig and M.E. Kraft. Washington: CQ Press.
- Lewis Creek Association. 2000. "Accomplishments from 2000" (annual letter).
- Lubell, M., M. Schneider, J.T. Scholz, and M. Mete. 2002. "Watershed Partnerships and the Emergence of Collective Action Institutions." *American Journal of Political Science* 46:148-63.
- National 4-Headquarters. 2002. Retrieved October 24, 2002. (http://www.4h-usa.org/4h_faq.htm).
- Otter Creek Audubon Society. 2001. "OCAS Home." Retrieved November 27, 2001. (<http://www.snakemountainart.com/ocas>).
- Otter Creek Audubon Society. 2001 "OCAS Programs and Events." Retrieved November 30, 2001. (<http://personal.globalnetisp.net/hkarlson/ocas/programs.htm>).
- Press, D. 2002. *Saving Open Space: The Politics of Local Preservation in California*. Berkeley and Los Angeles: University of California Press.
- Putnam, R.D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Runcie, C. 2001. Board member, LCA, interview. October 28.
- Savage, A., J. Isham, and C.M. Klyza. 2002. "The Transformation of Social Capital in Vermont." Presented at the annual meetings of the New England Political Science Association, May 4, Portland, ME.

- Shutkin, W.A. 2000. *The Land That Could Be: Environmentalism and Democracy in the Twenty-First Century*. Cambridge, MA: MIT Press.
- Skocpol, T. and M.P. Fiorina, eds. 1999. *Civic Engagement in American Democracy*. Washington: Brookings Institution Press.
- Skocpol, T., M. Ganz, and Z. Munson. 2000. "A Nation of Organizers: The Institutional Origins of Civic Voluntarism in the United States." *American Political Science Review* 94:527-46.
- Smith, D.H. 2000. *Grassroots Associations*. Thousand Oaks, CA: Sage Publications.
- Theodori, G.L., A.E. Luloff, and F.K. Willits. 1998. "The Association of Outdoor Recreation and Environmental Concern: Reexamining the Dunlap-Heffernan Thesis." *Rural Sociology* 63: 94-108.
- Vermont Natural Resources Council. 2000. *Vermont Environmental Directory*. Montpelier, VT: VNRC.
- Vermont Peace and Justice Center. 2002. *Vermont Grassroots Directory*, 3d ed. Burlington, VT: VPJC.
- Wild Earth*. 2001-2002. Issue devoted to citizen science. Fall/winter.
- Woolcock, M. 2002. "Social Capital in Theory and Practice: Where Do We Stand?" Pp. 18-39 in *Social Capital and Economic Development: Well-Being in Developing Countries*, edited by J. Isham, T. Kelly, and S. Ramaswamy. Chetlham, UK: Edward Elgar Publications.
- Wollebaek, D., and P. Selle. 2002. "Does Participation in Voluntary Associations Contribute to Social Capital? The Impact of Intensity, Scope, and Type." *Nonprofit and Voluntary Sector Quarterly* 31:32-61.

¹ Other scholars have recently documented the rise of civic environmentalism (e.g., Shutkin 2002), a movement that unites social and environmental concerns—often in an urban setting—under public-private collaboration. We have not found any systematic empirical evidence of the growth and influence of civic environmentalism in the United States.

² In this paper, as detailed in Section V, we adopt the terms bonding, bridging, and linking as they have recently been defined in the literature on social capital. As detailed in Woolcock (2002), bonding social capital refers to relations among family members, close friends, and neighbors; bridging social capital refers to relations among more distant associates and colleagues who share broadly similar demographic characteristics irrespective of how well they know one another; and linking social capital refers to alliances with sympathetic individuals in positions of power.

³ We adopt the definition of Woolcock (2002:22): “Social capital consists of the networks and norms that facilitate collective action.” See Castle (2002) for an excellent recent review of the conceptual strengths and weaknesses of this term.

⁴ The loss of influence of agricultural groups is illustrated by the fate of the Rutland County Agricultural Society, which has sponsored the Vermont State Fair since 1859. As the share of agriculture in the local economy has diminished, fewer farmers are showing cattle and crops at the fair. By 2000, as the society’s 11-member board fell to a single farmer, the remaining society members struggled to maintain the fair’s agricultural emphasis. The fair’s vegetable building, for example, now caters less to the farmer and more to the backyard gardener (Associated Press 2000).

⁵ On the related concept of grassroots groups, see Smith (2000).

⁶ We include conservation commissions in this category, since each local conservation commission, while statutorily authorized by state law, is not subject to the by-laws of a larger organization. In most cases, the structure of these groups is completely shaped by local conditions. For example, the former Douglas Pond Association, an autonomous group formed in Cornwall in the mid-1970s, was transformed into the Cornwall Conservation Commission a few years later.

⁷ Our methodology was similar to those documented in Grønberg and Paarlberg (2001), Kempton et al. (2001), and Smith (2000).

⁸ For example, *The Addison Independent's* "Community Calendar," which is available in print and online at <http://www.addisonindependent.com/Commcal.html>.

⁹ We eliminated, for example, groups with names such as the Green Mountain Water Environmental Association that, we learned from its director, is a trade association of water companies based in Montpelier.

¹⁰ Core members are "those who were most active, who attended meetings or participated in events or activities" (Kempton et al 2001:565).

¹¹ Because the town clerks in Addison County identified so few unknown groups, we did not systematically call every single town clerk in Washington County. However, even in Washington County, we did talk to most clerks to gather details about local groups (e.g., to collect the actual number of members of local conservation commissions (which by statute can have between three to nine members)).

¹² Our findings in this regard are not as striking as those of Kempton et al. (2001), who found that the actual number of groups in the Delmarva Peninsula and the state of North Carolina were seven to 20 times the number reported in the best published directories.

¹³ Wollebaek and Selle (2002) contend that even passive group members contribute to the generation of social capital through affiliation and affinity to a group.

¹⁴ Similar case-study evidence can be found in Ervin (2002).

¹⁵ These findings would run counter to another Putnam conclusion: that “place-based social capital is being supplanted by function-based social capital” (2000:184).

¹⁶ In fact, these changes are similar to earlier transitions to the Vermont agricultural economy and migration patterns of the middle nineteenth century (Barron 1984).