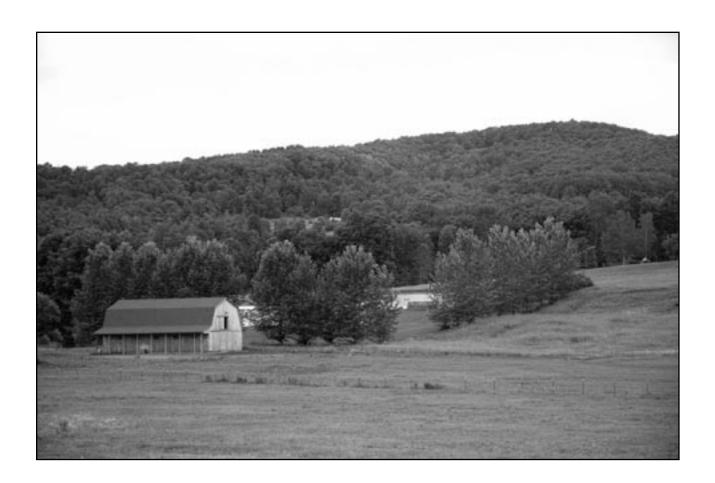




Owners of Idle Agricultural and Forest Land in New York State: Results from a Mail Survey

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Executive Summary

This report analyzes the New York State Department of Agriculture and Markets (NYSDAM) New York State Rural Landowner Survey. The objective of this survey was to provide information on how current owners of undeveloped land view that resource, their reasons for owning the land, and their plans for its future. A preliminary descriptive report, released as a joint New York State Department of Agriculture and Markets/National Agricultural Statistics Service publication in September 2005, is posted on the New York State Department of Agriculture and Markets web site.

Although the first of its kind for those agencies, the New York State Rural Landowner Survey addresses issues and databases with a long history in the academic and professional literature. Along with academic interests, the federal government has a fragmentary but long-standing history of collecting land ownership data that relate to farm and forest resources. This report builds on the initial NYSDAM summary of the Rural Landowner Survey and incorporates information from two follow-on NYSDAM surveys of respondents who indicated they owned idle agricultural land and forest land. Finally, an exhaustive list of literature pertaining to farm and forest land ownership was assembled based on literature surveys and reviews of published annotated bibliographies. (See http://www.agmkt.state.ny.us/rl_survey.pdf).

Background

Very vocal and widely chronicled debates over land and water use for agriculture and forestry are deeply embedded in American history and continue today. Though patterns of ownership and control of natural resources are closely intertwined with land and water policy issues, the information base describing the changing patterns of landownership--whether that focus is on farmland or forestland-was both fragmentary and out of date throughout the 1900s. Turning to farming, information on farm tenure has been collected in conjunction with

the Census of Agriculture since 1880 and was augmented in 1900 and 1920 to provide some limited information on all farmland owners. Comprehensive national studies of all farmland owners were conducted by the USDA in 1946, 1978, 1988, and 1999. With respect to forestland, the USDA's Forest Service instituted a National Woodland Owner Survey (NWOS) in 2001. Three other national surveys of forest-land owners' conducted by the USDA Forest Service preceded the NWOS and were published in 1958, 1982; and 1996. Beyond agency sponsorship, throughout the 20th century, university researchers and extension specialists have conducted episodic forestland or farmland owner surveys. The scope of most of these studies was a state or sub-state area and closely tailored to the shared interests of local communities, individual researchers, and their funders.

The Literature

A comprehensive list of references and citations was assembled for the purposes of this report. The discussion around forest landownership is more robust than that for farmland, as evidenced by dozens of articles and studies dealing with patterns of forestland ownership and the intentions of these landowners. Much of this literature has accumulated over the past quarter-century.

Another difference in the forestland and farmland literature goes to definitions. Literature on farmland ownership has relatively more concordance because of a uniform definition of land in farms and ranches; forestland surveys and discussions of forest management swerve between "private" owners, "family forest owners", "nonindustrial" forest owners, and so on. Similarly, surveys of forest owners are typically organized around land cover or landownership units such as a tax parcel, rather than an economic entity, such as a "farm" or a "firm".

Several major themes emerge from the forest landownership literature, including the following general points:

- The number of family forest owners is increasing annually, with greater parcelization of forestlands throughout the US (though there is variance with regard to growth of different parcel sizes regionally).
- Family forest owners tend to be older, better educated and more wealthy than the general population.
- The values, motivations and objectives for owning forest vary widely, reflecting the huge diversity of family forest owners.
- Generally, however, it appears that family forest owners in much of the country share a greater affinity with the general public than they do with professional foresters in terms of their views on environmental issues and their knowledge of forests and forestry.
- Most family forest owners rank things like aesthetics, recreation, wildlife viewing, and part of residence as the most important reasons for owning forestland; timber production is usually a low priority, although many owners surveyed in the various studies reviewed have harvested timber.
- Most family forest owners do not have written management plans.

A general sense of the themes predominant in the farmland ownership literature includes the following:

- The bulk of US farmland is held by individuals, defined to include sole proprietors and joint ownerships by husband-and-wife.
- Other tenure forms, including partnerships and corporate ownerships, are increasingly common but often held or controlled by members of a single-family to facilitate the assembly of economic-sized business units and/or the orderly transfer of farm assets to younger generations.
- Farmland ownership has diverged from farming as an occupation, with increasing amounts of farm acreage held by individuals and families concerned with meeting lifestyle rather than necessarily meeting economic or business objectives.
- Significant farmland held by older and more wealthy Americans.
- The role of gender in farmland ownership is not well understood.
- Purchase is the predominant method of farmland acquisition.

The New York State Rural Landowner Survey

According to a 2005 preliminary report, the NYSDAM statewide survey was based on the premise that "closer" management of the New York's idle and under-utilized land and forest resources can potentially contribute significantly to the economy of rural areas of the state". To that end, survey forms were mailed to owners of a sample of 6,600 parcels out of 291,022 tax parcels classified by local assessors as agricultural land, rural residences with acreage, other rural land, or private wild and forested. The parcels surveyed are thought to represent all land currently used for agriculture and forest product production and account for approximately 17 million acres. The response rate to this survey was 47 percent.

The preliminary report on the New York Rural Landowner survey (NYSDAM 2005) included the following key findings for the entire state:

- 90% of the state's undeveloped rural land could be classified as active agriculture (41%), forest land (41%) or idle farm land (8%).
- Both the track record of recent subdivisions and the plans of current owners of undeveloped land suggest that the conversion of undeveloped and farm land to low-density residential use is and will remain common.
- Financial considerations, including the property tax burden and the desire to generate income, are the most important reason undeveloped land is sold.
- About one third of responding owners hold the land primarily because it is the site of a current or future residence or second home, with agricultural use given as the next most common reason for ownership.
- Individuals, not partnerships or corporations, own most (four-fifths) of rural land, while four-fifths of owners live within the same county as the property.
- More recent owners do not appear to differ greatly from longer-term owners.

Regional Survey Results

As a point of departure in this report, the NYSDAM preliminary survey results are partitioned to contrast survey responses in metropolitan, micropolitan, and nonmetropolitan counties. Although all the parcels in the survey sample are designated as "undeveloped rural land", fully 57% of responses were about

properties located in metropolitan counties. Another 29% were for properties in micropolitan counties. Only 14% were for parcels in rural counties. Similarly, almost half of the referenced acreage (47%) was located in metropolitan counties, with less than a fifth (17%) in the rural counties and about a third (36%) in the micropolitan counties. Parcels in metropolitan counties were the smallest (41 acre average, 24 acre median), but parcels in rural counties were not the largest: the average parcel in a micropolitan county was 62 acres (41 acre median), and a little smaller in a rural county (60 acre average, 36 acre median).

- Four-fifths or more of all parcels surveyed are owned by one or more related individuals who hold the property as a sole proprietorship. Only a small minority of parcels are in corporate or other forms of ownership. Micropolitan parcels are the most likely to be owned by individuals, with metropolitan parcels more likely to be held by corporations, partnerships, and so on.
- The proportion of parcels with owners in residence varies by metro status, with about half of the parcels in both the metropolitan and micropolitan counties including the residence of their owners. This compares to only 37% of parcels in the rural counties.
- Considering all parcels, 83% that had been farmed by a previous owner had also been farmed during the past decade. Also suggesting continuity of use, a large but somewhat smaller proportion (68%) of the parcels that had not been farmed by the previous owner had not been farmed during the past decade. The remaining parcels were, apparently, more likely to have moved into or out of crop or pasture use. Nearly a third of parcels that had not been farmed by the previous owner had nevertheless been in active agriculture within the past decade, and nearly a fifth of the parcels that had been farmed by the previous owner had been not been actively farmed for at least a decade.

Reasons for Owning Undeveloped Land

• The two most commonly stated reasons for ownership, which apply across each county type, are to use the land for farming and as a place the owner currently lives. Together, these two uses comprise 61% of the parcels in metropolitan counties, 56% in

- micropolitan counties and 43% in rural counties.
- Compared to the metropolitan counties, open land in rural counties was more likely to be primarily used for second homes, hunting or fishing, and timber management. These three uses combined accounted for 31% of parcels in the rural counties versus only 10% in the metropolitan counties. At 22% of parcels for these three combined uses, the micropolitan counties are in the middle.
- Fewer than 10% of parcel owners reported they had subdivided and sold any part of the parcel within the past five years. Differences across county types were not dramatic.
- Future sales plans of the owners varied little across the county groupings, with about 10-12% expecting to sell the entire parcel within a five to ten year period, and with the majority of these expecting to sell sooner rather than later. An additional 4-7% anticipated selling only part of the parcel during the upcoming decade.
- Approximately half of the sales were expected to be to individuals interested in a residence; of these, a third were expected to build while the remainder were expected to move into a house already on the site. A small proportion of the sales were expected to be to farmers (8-13%), business establishments (2-4%), and municipal governments (1-3%). While about 8% of sales in both the rural and micropolitan counties were expected to be to residential developers, 20% of the expected sales in the metropolitan counties were seen as going to residential developers.
- Two financial reasons (tax burden and need for cash) dominate reasons cited for a pending sale, with the tax burden motivating about two out of five owners considering a sale.

Access and Recreational Uses

Over the years, structural changes in agriculture and shifting patterns of population settlement have led to numerous subdivisions of open-space land. Land ownership has become increasingly fragmented, with increasingly diffuse control over decisions on use. This means, among other things, that the uses of land and non-owner access to the land have become increasingly conditional, with large blocks of owners taking proactive steps to restrict land access.

- More than two-thirds of the parcels are posted as rescricted access in rural counties, with significantly smaller but still large majorities of the parcels in the other county types also posted. Many rural counties are Adirondack, Catskill and Tug Hill counties that host destinations for out of area outdoor recreationists and are attractive locations for second home buyers.
- Recreational access is not permitted at all on approximately three-fifths of the parcels in the sample. Concern about lawsuits was cited for about 40% of the parcels, with the desire to keep strangers off the land trailing closely in each of the county types. Concern about property damage was the motivating factor in a smaller portion, 10%, of the parcels for each county type.
- Focusing on the percent of parcels on which recreational access is allowed without restriction, hunting, cross country skiing and hiking are unrestricted on the greatest percentage of parcels. In general, the differences across metropolitan status are only a few percentage points. The largest percentage spread is for hunting: 18% of parcels are accessible without restriction in the micropolitan counties, as compared to 13% in the rural counties.

The Forestland Follow Up Survey

Survey respondents who reported some acreage devoted to forest were contacted with a second survey to gather more details on their ownership interests. Owners of 1,104 parcels of forestland responded to the follow up survey designed to elicit information specifically from forestland owners. Follow up questions focused on reasons for owning the property and the owners' forest management practices.

• Consistent with other extensive research on forestland owners, aesthetic and environmental reasons for owning forest land are prevalent, cited as a reason for ownership by 61% of forestland owners and as the most important reason by 12%. The second most common reason that was given for ownership was that the forestland served as part of "my primary residence" (49%); this reason was listed as the "most important" more often than any other (29% of responses). Direct use of the out doors through "hunting and fishing" (44%) and the "opportunity for recreational activity" (42%) were other frequently stated reasons.

- About half of the parcels had been harvested, at least for firewood, within the past decade by either the current or a previous owner. A nearly equal proportion of parcels were owned by someone expecting to harvest in the future.
- Our analysis indicates no significant statistical relationship between the length of tenure and the probability that forest products were harvested from the land parcel. Within the group of parcels that had been harvested, three reasons were most often reported: producing products for the owner's use, improving forest growing conditions, and generating a financial return. Generating the cash needed to pay local property taxes, which might be thought of as a specific example of generating a financial return, and improving wildlife habitat, which might be though of as a specific example of improving forest growing conditions, were also listed by a large minority of parcel owners, with property tax payments listed as "most important" by more than 10%.
- Loggers and private forestry consultants were the most common source of advice; each of them had been contacted by owners of about a quarter of the forested parcels. DEC foresters were next in line in percentage terms, while a number of other sources of information had been turned to by a small number of owners. More than one-fourth (29%) of the harvested forest parcels had been harvested by owners who had done so without the benefit of any consultation.
- Numerous owners (59%) had been contacted by someone interested in harvesting their woodlots.
 There was a strong relationship between this contact and a harvest having occurred.
- Plans for future harvest suggest that, if the plans are realized, most (20%) would be harvested within 5 years, a smaller number (16%) within 10 years, and, finally, 14% after an even longer time period.
- Only one out of ten forestland parcels is covered by a management plan. However, if a harvest is planned, the parcel is significantly more likely to have a management plan than otherwise: 16% of those who plan to harvest have a management plan, but only 4% of those who don't plan to harvest have one.

The Idle Agricultural Land Follow-Up Survey

Idle agricultural land comprised at least some part of 817 parcels, or 26.5% of all parcels surveyed. However, it was listed as the predominant land use on slightly less than 10% of parcels constituting 8% of the area in the sample. A follow-up survey was sent to owners of all parcels including any idle agricultural land. A total of 448 responses (55% response rate) were returned about parcels that had a median size of 31.4 acres.

- Although at least some part of the property in question was idle, owners of 30% of these parcels also farmed some land actively. It is not clear if the farmed land was on the parcel in question, or exactly what role the owner played in farming the land. Only 18% of the parcels with some idle land also include some land that is rented out to farmers. Parcels with owners who said they farmed "any other part of your property" were more likely to say they rented part of their property to a farmer as well.
- The most common idle land management plan, selected by well over a third (38%) of parcel owners, is to maintain the land through occasional mowing. Almost as common, at 31%, were the parcels with owners who had no plans at all for the parcel. Less that one in five parcels were expected to be returned to active agricultural use.

- Parcels with idle farmland whose owners were anticipating selling them averaged 41 acres and were smaller than the 50 acre average for all parcels that include some idle farmland. Among the minority of all owners of idle land who were planning to sell, financial reasons shaped the dominating motivations. The tax burden was the leading reason given for selling idle land, with 41% of parcel owners saying it was the most important reason for the planned sale. Fully half of the parcel owners indicated they planned to sell, at least in part, because they couldn't afford the taxes, a proportion equal to the number who said they needed the money for something else.
- Owners of small groups of parcels planned to return the land to hay (33%) most often, while about half as many (16%) were planning on field crops, and 16% also planned on nursery or greenhouse production.
- Fully 71% of the owners of parcels with idle agricultural land had no plans to sell or to return the land to active agriculture. Among the half-dozen reasons listed on the survey, the most frequently selected contributing factors were cost and lack of time. Poor soil or drainage was also a contributing factor for more than 20% of parcels. A basic lack of experience and lack of knowledge were each cited as contributing factors by owners of 18% of these parcels.



Introduction

The New York State Department of Agriculture and Markets (NYDAM) recently decided to use local property tax records to identify landowners holding farmland and/or forestland and then contact them with a mail survey. Entitled the New York State Rural Landowner Survey, the objective of this effort was to provide information on how current owners of undeveloped land view that resource, their reasons for owning the land, and their plans for its future. A preliminary, descriptive report on preliminary survey data was released as a joint New York State Department of Agriculture and Markets/National Agricultural Statistics Service report in September 2005 and is posted on the New York State Department of Agriculture and Markets web site.

The NYSDAM survey effort is unprecedented in that agency. Although the first of its kind, the survey addresses issues and databases long discussed in the academic and professional literature and within federal agencies. In addition, as this report will show, the federal government has a fragmentary but longstanding history of collecting land ownership data that relate to farm and forest resources. Also reported here is an extensive literature on the implications patterns of ownership and control of farm and forest resources have for public policy.

The objective of this report is to add value to the initial NYSDAM survey summary and to look for additional insights into the status and future of open land now classified as idle farmland or forestland. Additional information is likely to be useful to New York State policymakers seeking means to encourage more intensive use of the state's land and forest resources. This report builds on the initial NYSDAM summary of the Rural Landowner Survey and incorporates information from two follow-on NYSDAM surveys of respondents who indicated they owned idle agricultural land and forest land. Finally, an exhaustive list of literature pertaining to farm and forest land ownership was assembled based on literature surveys and reviews of published annotated bibliographies.

The literature search was conducted with two objectives in mind: 1) to determine whether previous surveys and studies in New York State provide the possibility of making some longitudinal comparisons with informa-

tion gleaned from the Rural Landowner Survey; and 2) to determine whether there have been recent studies of rural landowners conducted elsewhere in the Northeast or the entire United States that can provide useful points of comparison.

Review of the Literature

A Brief Historical Overview¹

Any nation's land and water resources are absolutely critical assets. In broad historical perspective, independence from England, land cessions, purchases, and the settlement of border disputes with other countries generated territorial expansion in the coterminous United States until just prior to the Civil War. These new lands fell within the public domain, a territory that initially comprised almost 1.5 billion acres or 76 percent of the land area of the coterminous U.S. Efforts to dispose of the public domain by transferring lands into private ownership dominated U.S. economic and political life through much of the 19th century and dictated the growth of American agriculture. New land was taken up in large measure for farm and ranch use. The availability of virgin land resources suited for farming triggered rapid expansion in the nation's capacity to produce food and fiber. Institutional arrangements that evolved with settlement of the frontier are imprinted upon the current structure of the Nation's food and fiber industry.

Just before the Civil War, settlement had pushed the frontier west of the Mississippi River. In those years, however, New York State was the premier agricultural region of the nation. In 1860, New York's cropland acreage was about 15.5 million acres, the largest cropland base in any single U.S. state. Westward settlement and attendant cropland expansion in the Corn Belt and further West outstripped acreage in the Northeastern U.S. by 1880; however, New York's cropland acreage crested at about 17.7 million acres according to reports from that decennial census--about 4 times the current cropland acreage reported in the last (2002) Census of Agriculture.

¹This section is drawn from Bills and Dideriksen, 1980.

Just a decade later, the 1890 national census counted 536 million acres of land in farms (cropland, pasture and range, woodland and support land) but pointed out that the American frontier had largely been captured by settlement and that the public domain was exhausted for farming "as far as easy use and sure results go". The nation realized a four-fold increase in total farm output between 1910 and 1977, largely due to technological development and production adjustments in the farm sector. Average crop production per acre increased dramatically over the 1910-1977 span.

Total cropland acreage has hovered in the 400 million acre range since the early 1900s, but regional adjustments have been dramatic. Productive cropland has been substituted for less productive cropland in several parts of the U.S. Cropland increases in several regions have been fueled by irrigation and drainage improvements. Cropland decreases have stemmed from cropland abandonment and conversion to new, irreversible uses. Abandonment has occurred on a large scale in the Southern and Northeastern States. Cropland abandonment was the central feature of shifting land use patterns in New York State for many decades; this once farmed acreage, for the most part, has reverted to natural forest cover. At the same time, population growth and spillovers to open country have increased land requirements for residential, commercial, industrial, and transport uses. However, USDA data series and our own experience shows that reversion of open land to forest cover has trumped land development across many landscapes throughout the Northeast, the Appalachians, and further south along the Atlantic Seaboard.

Land-Use Dynamics & Landownership

While forestland is a well recognized and valued resource, a major premise underlying large-scale transfers of the public domain to private ownership during the 19th century and beyond was that private action would assure the nation's supply of food and fiber commodities and generate nearly universal farmland ownership. By the later 1800s, with a growing perception that the American frontier was closing and that the structure of agriculture was shifting, both of these notions were under increasing vocal attack in the public square. Apprehension over future scarcity and the capacity of the U.S. natural resource base to meet future raw material requirements spawned numerous debates over federal

land and water policy. Although few now imagine that the U.S. does not have the capacity to feed itself, very vocal and widely chronicled debates over land and water use for agriculture and forestry continue today.

Patterns of ownership and control of natural resources are closely intertwined with land and water policy issues. Along with concerns over scarcity, the nation identified urgent concerns in the early 1900s over patterns of land tenancy and the destructive aspects of poorly managed cropland and rangeland use. However, the information base describing the changing patterns of landownership--whether that focus is on farmland or forestlandwas both fragmentary and out of date throughout the 1900s. Turning to farming, information on farm tenure has been collected in conjunction with the Census of Agriculture since 1880 and was augmented in 1900 and 1920 to provide some limited information on all farmland owners (Geisler et al, 1983). But census data focus on farm operators and do not describe the expanding category of nonfarm owners of farmland. The first comprehensive, national study of all farmland owners was undertaken in 1946 by the USDA (Inman and Fippin, 1949). The 1946 study provided unprecedented data on the personal characteristics of individuals with ownership interests in the nation's farmland base.

After a lapse of more than three decades the USDA conducted a new national study of landownership summarized in Lewis (1980). This 1978 effort by the then Economics, Statistics and Cooperatives Service (now the Economic Research Service) was more extensive than the 1946 work in that it dealt with the ownership of all privately owned land - farm and ranch land, other rural land, and urban land. Similarities and contrasts between the 1946 and 1978 surveys are analyzed in depth in Geisler et al (1983).

In the aftermath of the 1987 Census of Agriculture, the USDA's Economic Research Service reverted to form and, as in 1949, collaborated with the Census Bureau on a survey of farmland owners identified as landlords in the 1987 Census. Results from that national follow-on survey were reported as the 1988 Agricultural Landownership Survey (ALOS). That survey was repeated as a follow-on to the 1997 Census of Agriculture (by then the responsibility of the USDA's National Agricultural Statistics Service or NASS) and was reported as the 1999 Agricultural Landownership Survey (ALOS).

Turning to forest land, the USDA Forest Service, Forest Inventory and Analysis (FIA) Program instituted the National Woodland Owner Survey (NWOS) in 2001. Three other national surveys of forest-land owners' conducted by the USDA Forest Service preceded the NWOS (Josephson and McGuire, 1958; Birch et. al., 1982; Birch 1996). The NWOS is designed to be more closely aligned with periodic companion state-level forest resource inventories conducted by the Forest Service. The forest resource inventories collect information related to forest composition, structure, and health. The NWOS is charged with determining: who are the forest land owners; why are forest lands owned; how are forest lands used; and what are the owners' plans for their forest lands. The intent is to arrange comparisons of land ownership information with forest resources inventories to produce contemporaneous information about the resource and the people who own it (Butler, Leatherberry, and Williams, 2005).

For the most part, USDA agencies concerned with core data on ownership/control of farm and forest resources appear to have operated in polar universes. The only, but very noteworthy, exception was a collaboration developed within the USDA to exploit data collected in the 1978 Landownership Survey. Because, as described above, the scope of this study extended to all rural land, Forest Service researchers extracted responses from forestland owners from the sample and conducted a separate analysis (Birch et. al, 1982). This was the first indepth, national report on private forest-land owners in the United States (Butler et al, 2005).

Beyond agency sponsorship, throughout the 20th century, university researchers and extension specialists have conducted episodic forestland or farmland owner surveys. The scope of most of these studies was a state or sub-state area and closely tailored to the shared interests of local communities, individual researchers, and their funders. A few examples are referenced in this review, e.g., King, 1976, but a full accounting of the scope and nature of these disparate, fugitive land ownership studies extends beyond the time and resources available for this report.

The Literature

A comprehensive list of references and citations is presented in a later section of this report. Because of the polarity around data and social discourse for farmland and forestland, literature pertinent to each is organized into separate subsections. This approach not only fa-

cilitates literature entry for interested readers but also helps graphically illustrate the relative weight assigned to each category of land resources. Clearly the discussion around forest landownership is more robust than that for farmland, as evidenced by dozens of articles and studies dealing with patterns of forestland ownership and the intentions of these landowners.

The second abiding difference in the forestland and farmland literature goes to definitions of the resource. Literature surrounding farmland has relatively more concordance because the discussion is largely anchored in a uniform definition of land in farms and ranches. That definition is promulgated by the U.S. Office of Management and Budget and turns on an annual sales criterion for specified farm commodities. Since 1972, a farm is defined as a place with production valued at \$1,000 or more per year. The farmland base includes land owned by the farm operator along with acreage leased from others. In sharp contrast, literature surrounding forestland is, to some extent, blurred by alternate definitions of the forest resource. Agency operatives and academics alike have seized upon opportunities to be creative when defining resources under scrutiny. As a result, forestland surveys and discussions of forest land management can and do swerve between definitions crafted around "private" owners, "family forest owners", "nonindustrial" forest owners, and so on. Similarly, surveys of forest owners are typically organized around land cover or landownership units such as a tax parcel, rather than an economic entity, such as making "farm" the unit of study.

As pointed out in the literature reviews cited, several major themes emerge from the forest landownership literature. As reported by Hodgdon and Tyrrell (2003), these themes include the following general points:

- The number of family forest owners is increasing annually, with greater parcelization of forestlands throughout the U.S. (though there is variance with regard to growth of different parcel sizes regionally).
- Family forest owners tend to be older, better educated and more wealthy than the general population.
- The values, motivations and objectives for owning forest vary widely, reflecting the huge diversity of family forest owners.
- Generally, however, it appears that family forest owners in much of the country share a greater affinity with the general public than they do with professional for-

esters in terms of their views on environmental issues and their knowledge of forests and forestry.

- Most family forest owners rank things like aesthetics, recreation, wildlife viewing, and part of residence as the most important reasons for owning forestland; timber production is usually a low priority, although many owners surveyed in the various studies reviewed have harvested timber.
- Most family forest owners do not have written management plans.

Many of those themes resonate to one degree or another in the farmland ownership literature. One significant difference is that landownership concerns in American agriculture were initially rooted in the fundamentals of ascension to full farm ownership in adherence with the Jeffersonian principles for nationhood. These principles influenced policies for disposing of the public domain throughout the 19th century and beyond. Increasing rates of farm tenancy. (a situation where the farm operator owns none of the land operated) in the early 1900s caused alarm in public policy circles and fueled much of the public dialogue about landownership and attendant concerns with soil conservation.

The Great Depression exacerbated those concerns but the World War II years were generally recognized as a watershed for American agriculture and patterns of land tenancy. The nation's first farmland ownership survey, conducted in 1946, provided unprecedented data on the personal characteristics of individuals with ownership interests in the U.S. farmland base (Inman and Fippin, 1949). Although the U.S. Census Bureau and the USDA have made substantial investments in farmland ownership data since the mid-1970s, enthusiasm in the research community for questions involving patterns of landownership -- whether inside government or outside--is much less evident than for forestland assets. Based on counts of articles and reports inventoried in this report, the trajectory of professional interest in exploiting landownership data for research/educational pursuits appears to be trending down markedly in the farmland arena. While academic interest in factors influencing farmland values continues unchecked, the circumstances around ownership receive limited attention. The USDA's Economic Research Service, for example, appears to be conducting essentially no applied research on ownership patterns and their implications for food and fiber production. Similar ambivalence is evident in the wider academic community. This trend is somewhat ironic insomuch as Census data clearly indicate that steadily increasing shares of the U.S. farmland base are owned by individuals or other entities who lease land to active farmers but have no direct farm interests of their own.

A general sense of the themes predominant in the farmland ownership literature include following:

- The bulk of U.S. farmland is held by individuals, defined to include sole proprietors and joint ownerships by husband-and-wife.
- Other tenure forms, including partnerships and corporate ownerships, are increasingly common but often held or controlled by members of a single-family to facilitate the assembly of economic-sized business units and/or the orderly transfer of farm assets to younger generations.
- Farmland ownership has diverged from farming as an occupation, with increasing amounts of farm acreage held by individuals and families concerned with meeting lifestyle rather than necessarily meeting economic or business objectives.
- Significant farmland acreage is held by older and more wealthy Americans.
- The role of gender in farmland ownership is not well understood.
- Purchase is the predominant method of farmland acquisition.

The Statewide Survey²

According to a 2005 preliminary report, the NYSDAM statewide survey was based on the premise that "closer" management of the New York's idle and under-utilized land and forest resources can potentially contribute significantly to the economy of rural areas of the state". The report went on to assert that this potential can only be realized if the interests and motivation of those who control this property are better understood and better served; further, anecdotal evidence has suggested that the profile of rural landowners is changing, and that the motivation and interests of newcomers might vary from those of long-time rural residents. This survey was undertaken to provide a comprehensive, current view of

² This section is drawn from the New York State Department of Agriculture and Markets, 2005.

how the current owners of the state's private open land resources are using their land holdings, and what they plan to do with them.

To allow the NYSDAM Commissioner a better vantage point for addressing these questions, a, a mail survey of landowners was organized to gather insight into what is happening to open and forested land throughout New York State. Survey forms were mailed to a sample of 6,600 parcels out of 291,022 tax parcels classified by local assessors as agricultural land, rural residences with acreage, other rural land, or private wild and forested land (see Appendix I for further details). These land categories are referred to collectively in the report as undeveloped rural land. The parcels surveyed are thought to represent all privately owned land currently used for agriculture and forest product production (except licensed harvesting of timber on state land), as well as other land with the capability of use for agriculture or forest production.

Many include a year-round or seasonal residence, but with an average parcel size of about 50 acres, the residence, lawn and associated outbuildings generally occupy a small percentage of the land area. Together, the land classifications surveyed account for approximately 17 million acres out of the 31 million acres that fall within the geographic boundaries of New York State. They exclude state and federal land, wild, conservation and park land, land used to provide community services, and land developed for industrial, commercial and higher density residential use.

The response rate to this survey was 47 percent. This rate permits interpretation of results with some confidence at the state level. Analysis reported here looks at several substate relationships as well.³

The preliminary report on the New York Rural Landowner survey (NYSDAM 2005) included the following key findings for the entire state:

• 90% of the state's undeveloped rural land could be classified as active agriculture (41%), forest land (41%) or idle farm land (8%).

- The conversion of undeveloped and farmland to lowdensity residential use is and will remain common; this conclusion is suggested by both the track record of recent subdivisions and the plans of current undeveloped land owners.
- Financial considerations, including the property tax burden and the desire to generate income, are the most important reason undeveloped land is sold.
- About one third of responding owners hold the land primarily because it is the site of a current or future residence or second home, with agricultural use given as the next most common reason for ownership.
- Individuals, not partnerships or corporations, own most (four-fifths) of rural land, while four-fifths of owners live within the same county as the property.
- Newer owners do not appear to differ greatly from longer-term owners.

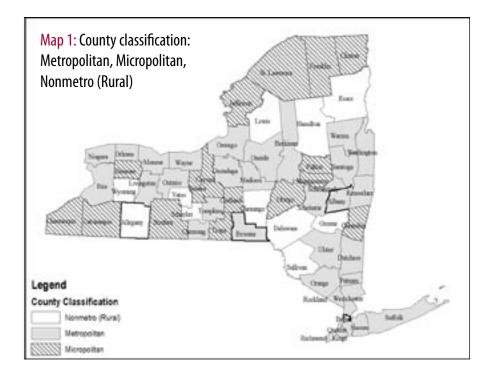
Regional Survey Results

In this section, the NYSDAM preliminary survey results are partitioned to contrast survey responses in metropolitan, micropolitan, and nonmetropolitan—designated here as rural--counties, as shown in Map 1. These county designations are made by the U.S. Census Bureau based on urban population concentrations and commuting patterns.⁴ The basic designations are commonly used by the research community to take urban influence into account.

While the interest in urban influence for New York State is almost reflexive, application of the idea to the survey data requires some elaboration. The concentration of parcel subdivision activity, and the general location of "undeveloped rural land", at least as read through the lens of this standard classification system for counties as used by the Census, can be seen in the simple

³ Chi-square tests of difference were performed on all comparisons of results by region. As a general rule, regional differences that varied by more than about 5% were statistically significant at 95% confidence levels for variables involving the entire sample. Larger differences (e.g. variations greater than about 10%) were required for differences to be significant in subsamples involving smaller numbers of observations. Details are available from the authors.

⁴ As defined by the U.S. Census, each metropolitan statistical area must have at least one urbanized area of 50,000 or more inhabitants. Each micropolitan statistical area must have at least one urban cluster of at least 10,000 but less than 50,000 population. The county (or counties) in which at least 50 percent of the population resides within urban areas of 10,000 or more population, or that contain at least 5,000 people residing within a single urban area of 10,000 or more population, is identified as a "central county" (counties). Additional "outlying counties" are included if they meet specified requirements of commuting to or from the central counties. See http://www.census.gov/population/www/estimates/aboutmetro.html (as of 9/18/06) for more information. The designation as "rural" of counties that are neither in metropolitan or micropolitan statistical areas is our own, not that of the Census.



geographic distribution of these parcels. Though the parcels in the sample are designated as "undeveloped rural land", fully 57% of responses were about properties located in metropolitan counties. Another 29% were for properties in micropolitan counties. Only 14% were for parcels in rural counties.

Moreover, almost half of the referenced acreage (47%) was located in metropolitan counties, with less than a fifth (17%) in the rural counties and about a third (36%) in the micropolitan counties. And though parcels in

metropolitan counties were, as expected, smallest (41 24 acre median), parcels in rural counties were not the largest (see Figure 1): the average parcel in a micropolitan county was, at 62 acres (41 acre median), a little larger than that in a rural county (60 acre average, 36 acre median).

There is, in other words, ample reason for exercising care when putting the whole concept of "undeveloped rural land" into the context of any given issue, and it is unlikely that adequate understanding of rural land and rural landowners can be achieved if only land in New York's most rural counties are examined. Any designation of "ruralness" that uses county as the fundamental classification unit is likely to be subject to the same caution.

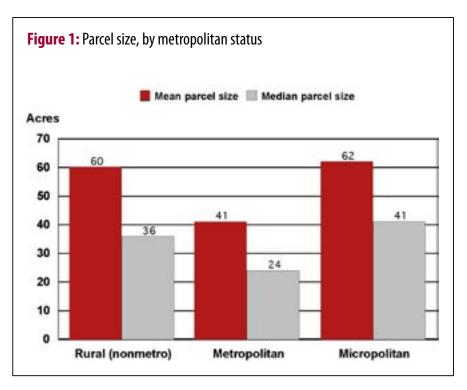
Ownership

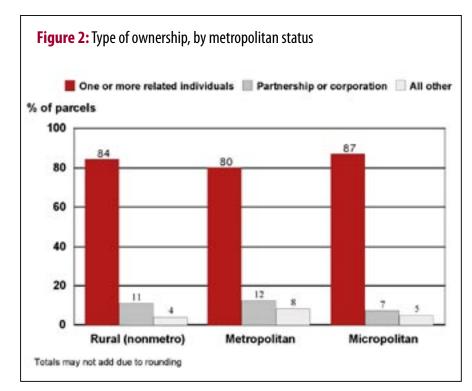
As shown in Figure 2, four-fifths or more of all parcels surveyed are owned by one or more related individuals who hold the property as a sole proprietorship. Only a small minority of parcels are in corporate or other forms of ownership. While this result does not vary dramatically by county type, the differences are statistically significant. Micropolitan parcels are the most likely to be owned by individuals, with metropolitan parcels more likely to be held by corporations, partnerships, and the like.

However, individuals tend to own parcels that are, on average, notably smaller (47 acres) than parcels in other ownerships (62 acres). This observation holds

regardless of metropolitan or nonmetropolitan status. It is also consistent with another result across metro classes, namely that individuals are more likely to own parcels that serve as their principal residence, while parcels in other ownership types are more much more likely to be used for agriculture or forestry, or owned primarily for other investment purposes.

The difference in average parcel size is most striking in the rural counties, where the average parcel owned by individuals was only 56% as large as those owned by





others (54 v. 96 acres). In micropolitan areas, the ratio was 67% (58 v. 88 acres) and in metropolitan counties the ratio was 85% (40 v. 47 acres). Overall then, the vast majority of acreage in micropolitan areas was owned by individuals (82%), while a somewhat smaller portion of the land (about three fourths) was owned by individuals in both rural and metropolitan areas (see Figure 3)

Figure 4 shows how the proportion of parcels with

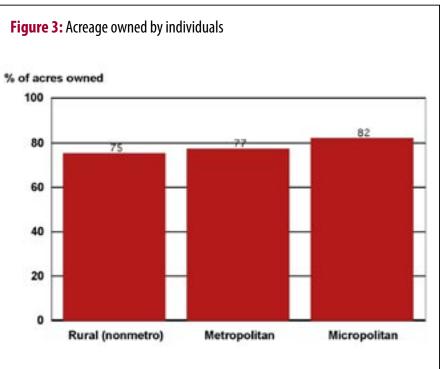
owners in residence varies by metro status, with about half of the parcels in both the metropolitan and micropolitan counties including the residence of their owners. This compares to only 37% of parcels in the rural counties. Indeed, in the rural counties more than a third of the parcels had owners who can be classified as nonresidents because they live outside the county altogether, as compared to a fifth or fewer in the metropolitan (21%) and micropolitan (15%) counties. In each county type parcel owners living in the county are more likely than those living outside to be related individuals as opposed to corporate or other non-individual owners. This difference is greatest in the rural counties, where 89% of owners living in the same county as their parcel are families or individuals. In contrast, only 75% of rural county parcel owners residing outside of the county are families or individuals.

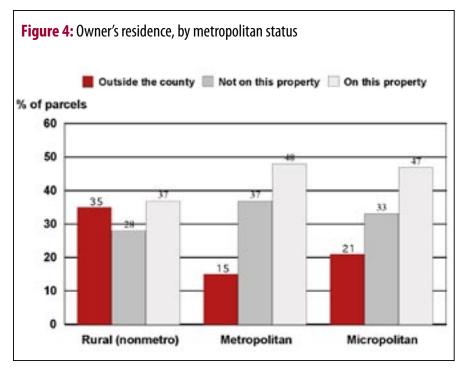
There is little variation by county type in the length of tenure. Although 8% of respondents provided no data on length of tenure, other parcels in each county group had been held by their current owner since 1987 (the median time). The propensity to purchase or inherit property also varied little by county type, as about four out of five parcels were purchased in each kind of county.

Farming and Parcel History

Survey respondents were asked if a) their parcel had been farmed by the previous owner, and b) if any part of the parcel had been farmed in the prior 10 years. There was, as expected, much overlap between

the responses to these questions. Considering all parcels, more than four-fifths (83%) of the parcels that had been farmed by the previous owner had also been farmed during the past decade. Also suggesting continuity of use, a significant but somewhat smaller proportion (68%) of the parcels that had not been farmed by the previous owner had not been farmed during the past decade. The remaining parcels were, apparently, more likely to





these to questions, was found in the micropolitan counties, and the lowest proportion was found in the rural counties. This result is consistent,6 however, with the observation that relatively more productive land, whether for food or forestry production, is often situated near urban population concentrations. Another reason that farming on undeveloped land in rural counties does not rank higher is the greater prevalence of forestland. Considering the undeveloped study acreage in the rural counties, parcels that constituted 58% of the total acreage were "predominantly" forested. The comparable figure was 35% in metropolitan, and 39% in micropolitan counties.

Reasons for Owning Undeveloped Land

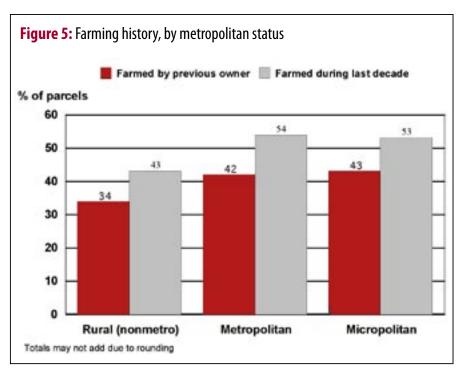
Figure 6 extends our understanding of the owners' intended uses of the land with a focus on the primary reason the land is held. The two most commonly stated

have moved into or out of crop or pasture use. Nearly a third of parcels that had not been farmed by the previous owner had nevertheless been in active agriculture within the past decade. Nearly a fifth of the parcels that had been farmed by the previous owner had not been farmed for at least a decade.⁵

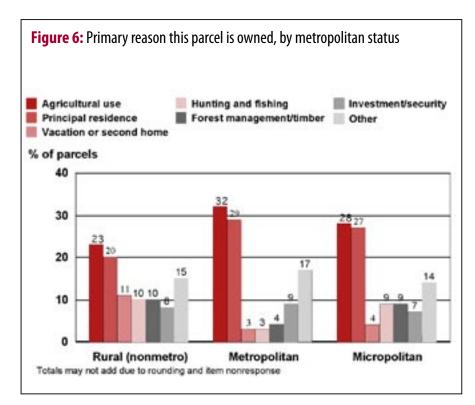
Figure 5 shows that the undeveloped parcels in each county group were more likely to have been farmed in the most recent decade than they were to have been pre-

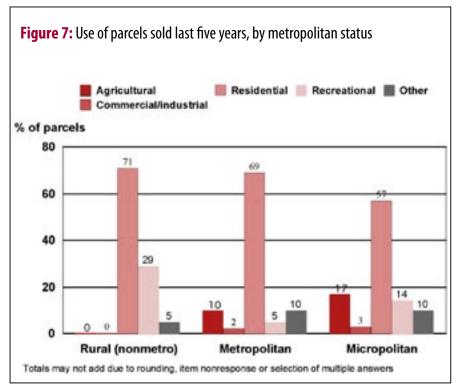
viously owned by an active farmer. It also shows that a higher proportion of undeveloped parcels were farmed in the micro and metropolitan counties than in the rural counties. This result, somewhat unexpected from the perspective of urban influence, continues to hold if acreage rather than the number of parcels is considered: the highest proportion of undeveloped acreage that had been in farming, according to responses to

⁶ The percent of undeveloped acreage within each county type that had been farmed within the decade was 52%, 61% and 63% for rural, metropolitan and micropolitan respectively. The percent of acreage that had previously been owned by an active farmer was 41%, 44% and 50% for rural, metropolitan and micropolitan respectively.



⁵ The results cannot be directly interpreted as a comparison between the practices of the current versus previous owner, as nearly one-third of the parcels had been acquired within the previous ten years. However, dropping these more recently acquired parcels ensures that any farming by a previous owner would have been more than a decade earlier, and farming within the decade would be by the current owner. Analysis of this modified sample shifted the cited percentages by only a few points.





reasons for ownership, which apply across each county type, are to use the land for farming and as a place the owner currently lives (presumably on an adjacent parcel, since the parcel in question is designated by ORPS as undeveloped). Within each county type, the number of parcels devoted primarily to farming is roughly the same as the number devoted to a primary residence.⁷

However, together these two uses comprise 61% of the parcels in metropolitan counties, 56% in micropolitan counties and only 43% in rural counties.⁸

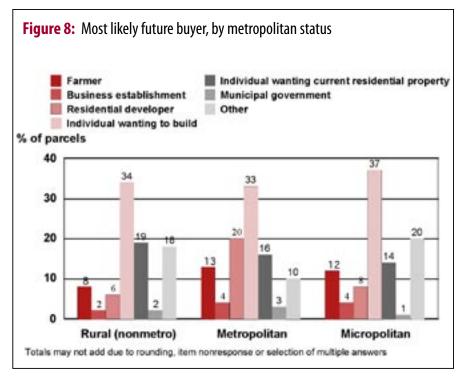
Compared to the metropolitan counties, open land in the rural counties was more likely to be primarily used for second homes, hunting or fishing, and timber management. These three uses combined accounted for 31% of parcels in the rural counties versus only 10% in the metropolitan counties. At 22% of parcels for these three combined uses, the micropolitan counties are in the middle. Most of the difference between the micropolitan and rural counties is that rural counties have a major portion of parcels (11%) assigned to second homes.

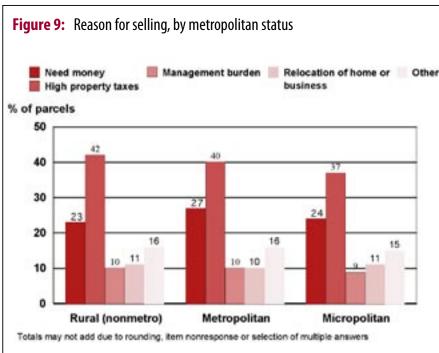
Parcels with Land Sold off within Past Five Years

Fewer than 10% of parcel owners reported they had subdivided and sold any part of the parcel within the past five years. Differences across counties were not dramatic. T he percentage that had undergone such a sale was smallest in the rural counties and metropolitan counties (5% and 7% respectively) and largest in the micropolitan counties (9%). Figure 7 indicates that the undeveloped parcels that were sold were generally intended for conversion to residential use. Though the number of sales in the rural counties is probably too small to support a general conclusion, it is notable that none of the sales in that sample were for agricultural uses. In contrast, agricultural sales constituted a distinct if minority portion of the number of sales in both the metropolitan (10%) and micropolitan (17%) counties.

⁷ Of course, parcels used in agriculture tend to be significantly larger than those used for a primary residence. Despite the even split in number of parcels, the total acreage of parcels reported to be devoted to a primary residence was therefore half the acreage devoted to farming in the rural counties and 57% in micropolitan counties. In metropolitan counties, the ratio was the highest at 69%.

⁸ The distribution of acreage is very similar.





Future sales plans of the owners varied little across the county groupings, with about 10-12% expecting to sell the entire parcel within a five to ten year period, and with the majority of these expecting to sell sooner rather than later. An additional 4-7% anticipated selling only part of the parcel during the upcoming decade.

Most of those planning to sell were asked to speculate on the interests of prospective buyers (Figure 8).

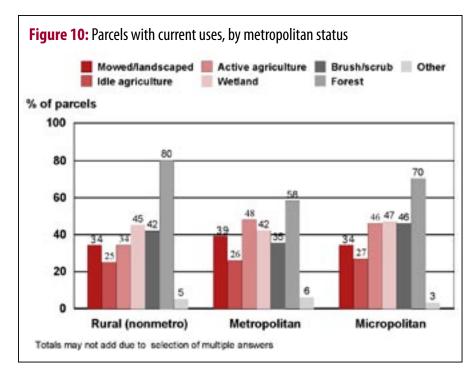
Approximately half of the sales were expected to be to individuals interested in a residence; of these, a third were expected to build while the remainder were expected to move into a house already on the site. A small proportion of the sales were expected to be to farmers (8-13%), business establishments (2-4%), and municipal governments (1-3%). The only large variation by type of county was for expected sales to residential developers and sales to the "other" category. Whereas about 8% of sales in both the rural and micropolitan counties were expected to be to residential developers, 20% of the expected sales in the metropolitan counties were seen as going to residential develop-

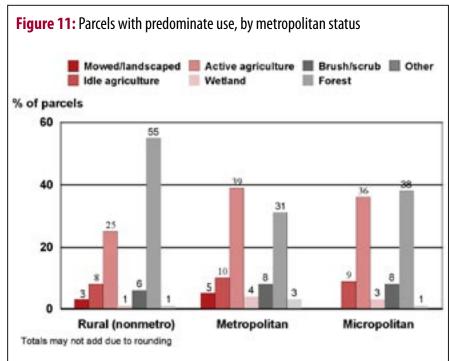
Figure 9 displays responses to a question about the most important reason the owner was planning to sell the property. The two financial reasons (tax burden and need for cash) dominate consistently across county types, with the tax burden motivating about two out of five owners considering a sale. Although the proportions of owners motivated to sell by the tax burden are statistically indistinguishable across municipal types, the observed difference is probably smaller than warranted by the actual variations in tax rates.

Land Types on Parcels

Many land parcels are used for more than one purpose. Figures 10 and 11 reflect the distribution of uses on surveyed parcels. Forest cover is most common in each of the three county classes, and also the most variable. Some forest acreage is accounted for

on 80% of the rural parcels, 70% of micropolitan parcels and 58% of metropolitan parcels (Figure 9). It is the predominant land type (Figure 10) on more than half of the rural parcels, where active agricultural parcels are the distant runner up as the predominant land type on only 25% of the parcels. In contrast, on the micropolitan parcels, active agriculture and forest are predominant on nearly equal numbers of parcels, while on the metro-





politan parcels active agriculture edges past forest land as the most prevalent predominant land type. In comparison, there is relatively little variation across county classes for any of the other land use types, though brush and scrubland is only found on 35% of metropolitan parcels as compared to 42% of rural and 46% of micropolitan parcels.

Access and Recreational Uses

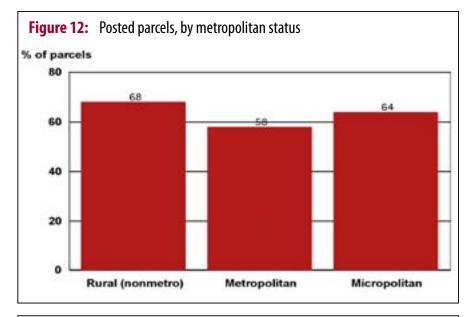
Over the years, structural changes in agriculture and shifting patterns of population settlement have led to numerous subdivisions of open space land. Land ownership has become increasingly fragmented, with increasingly diffuse control over decisions on use. This means, among other things, that the uses of land and non-owner access to the land have become increasingly conditional. Large blocks of owners take proactive steps to restrict land access.

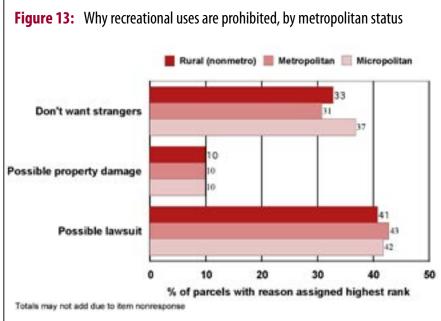
To help illuminate these developments, this section focuses on the recreational uses that are permitted on parcels in the three county types. As a point of departure, Figure 12 shows that more than twothirds of the parcels are posted with access restrictions in the rural counties, with significantly smaller but still large majorities of the parcels in the other county types also posted. It seems likely that the reason more parcels in the rural than metropolitan counties are posted is related to the character of the rural counties: many are Adirondack, Catskill and Tug Hill counties that host destinations for out of area outdoor recreationists and are attractive locations for second home buyers.

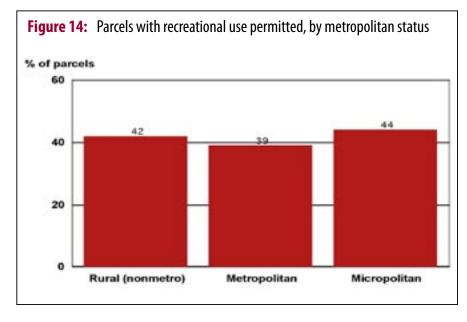
Recreational access is not permitted at all on approximately three-fifths of the parcels in the sample. Figure 13 gives the major reasons recreational use is not allowed. Concern about lawsuits was give for about 40% of the parcels, with the less specific desire to keep strangers off the land trailing closely in each of the county types. Concern about property damage was the moti-

vating factor on a smaller portion (10%) of the parcels for each county type.

The proportion of parcels on which recreational use is allowed under various circumstances is exhibited in Figures 14-16. As can be seen in Figure 14, the overall numbers are near 40% and variation by county classification is slight. Figure 15 disaggregates responses by activity for all parcels on which some kind of recreation is allowed, focusing on the percent of parcels on which







recreation is allowed without restriction. Of the half-dozen activities listed, hunting, cross country skiing and hiking are unrestricted on the greatest percentage of parcels, at least in one of the county types.

However, no activity is unrestricted on more than about a fifth of the parcels. In general, the differences across the county types are only a few percentage points. The largest percentage spread is in fact for hunting: 18% of parcels are accessible without restriction in the micropolitan counties, as compared to 13% in the rural counties.

Figure 16 focuses on the parcels on which recreation is allowed, but with restrictions. For nearly all activities, there is only minor percentage variation across either activity or county type, with restricted access allowed on about a fifth to a quarter of parcels. Again, the obvious exception is for hunting, which is allowed only under restricted circumstances on nearly three-quarters of parcels in rural and micropolitan counties, as compared to just under two-thirds of parcels in the metropolitan counties.

The Forestland Follow Up Survey

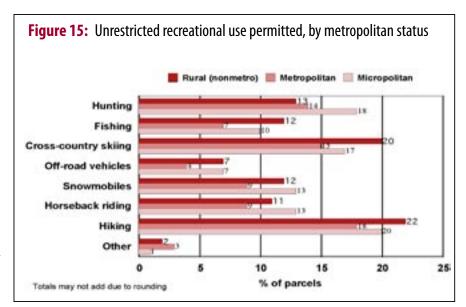
Survey respondents who reported some acreage devoted to forest use were contacted with a second survey to gather more details on their ownership interests. Owners of 1,104 parcels of forestland responded to the follow up survey (see Appendix II) designed to elicit information specifically from forestland owners. Follow up questions focused on reasons for owning the property and the owners' forest management practices.

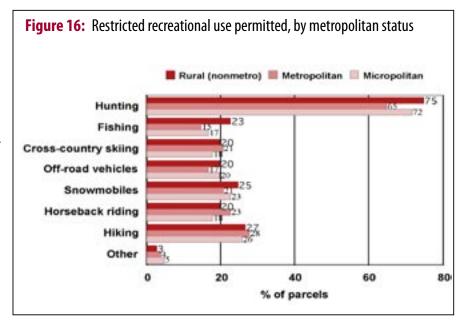
Consistent with other extensive research on forestland owners, Figure 17 shows that aesthetic and environmental reasons ("enjoyment of environment and scenic beauty") for owning forest land are prevalent, being cited as a reason for ownership by 61% of forestland owners and as the most important reason by 12%. The second most common reason that was given for owner-

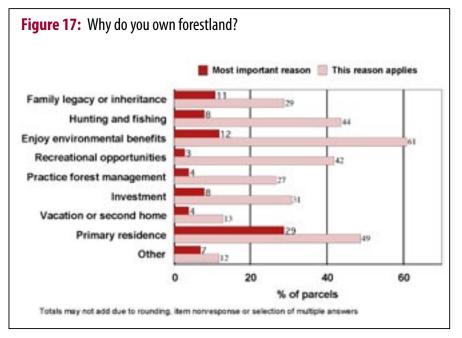
ship was that the forestland served as part of "my primary residence" (49%); this reason was listed as the "most important" more often than any other (29% of responses). Direct use of the outdoors through "hunting and fishing" (44%) and the "opportunity for recreational activity" (42%) were other frequently stated reasons. No other reason applied to even a third of the owners of forestland parcels considered, though the investment and forest management benefits, as well as the fact of family inheritance, were reasons given for ownership by owners of nearly a third of the parcels.

About half of the parcels had been harvested, at least for firewood, within the past decade by either the current or a previous owner (Figure 18). A nearly equal proportion of parcels were owned by someone expecting to harvest in the future (Figure 23).

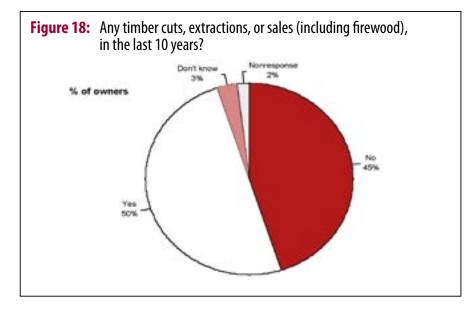
Our analysis indicates no significant statistical relationship between the length of tenure and the probability that forest products were harvested from the land parcel. Within the group of parcels that had been harvested, Figure 19 addresses the question of why the harvest occurred.9 Three reasons were most often reported: producing products for the owner's use, improving forest growing conditions, and generating a financial return. Each of these reasons was reported for about half or more of the harvested parcels, and each of these reasons was also considered the "most important" for approximately a fifth to a quarter of the parcels. Generating the cash needed to pay local property taxes, which might be thought of as a specific example of generating a financial return, and improving wildlife habitat, which might be thought of as a specific example of improving forest growing conditions, were also listed by a large minority of parcel owners, with property

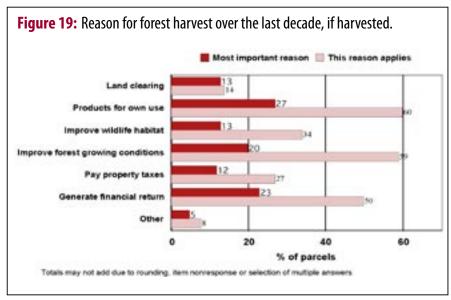


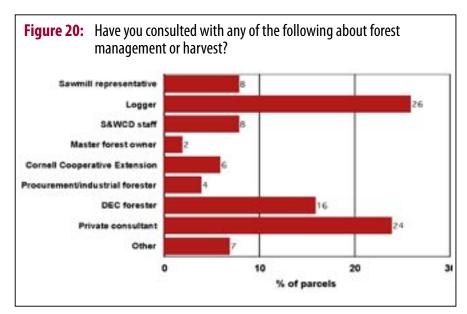




⁹ This chart also shows that correcting for inconsistent answers does not change the overall pattern of responses substantially.







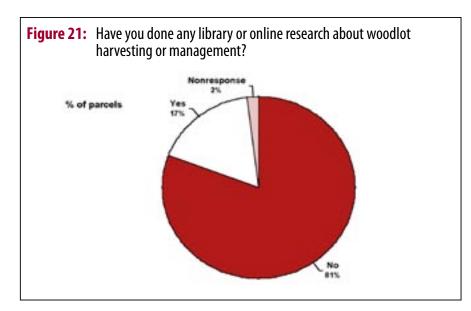
tax payments listed as "most important" by more than 10%. Land clearing was a reason noted only by a relatively small minority of survey respondents.

Figure 20 addresses the issue of whether or not owners are seeking advice about forest management practices and to whom they are speaking. Loggers and private forestry consultants were the most common source of advice; each of them had been contacted by owners of about a quarter of the forested parcels. DEC foresters were next in line in percentage terms, while a number of other sources of information had been turned to by a small number of owners. Not shown in Figure 20 is the result that more than onefourth (29%) of the harvested forest parcels had been harvested by owners who had done so without the benefit of any consultation. Moreover, as shown in Figure 21, only a fairly small minority of parcels (17%) were owned by someone who had done their own research into woodlot harvesting or forest management.

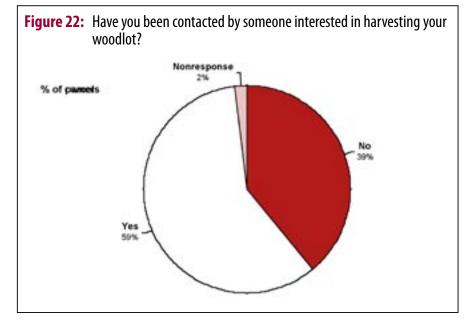
Quite a few owners had been contacted by someone interested in harvesting their woodlots (59%, as shown in Figure 22). There was a strong relationship between this contact and a harvest having occurred, as 63% of parcels that had been harvested were owned by someone who had been contacted, while only 31% of parcels that had not been harvested were owned by someone who had been contacted.

Plans for future harvest are on display in Figure 23. As noted above, owners have plans to harvest just under half of the forestland parcels in the future. If the plans are realized, most (20%) would be harvested within 5 years, a smaller number (16%) within 10 years, and, finally, 14% after an even longer time period.

As seen in Figure 24, only one out of ten forestland parcels is covered by a management plan. However, if a harvest is planned, the parcel is significantly more likely to have a management plan than otherwise: 16% of those who plan to harvest have a manage-





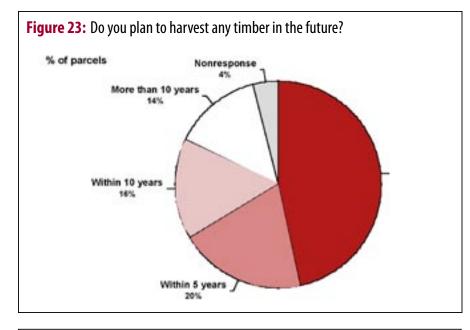


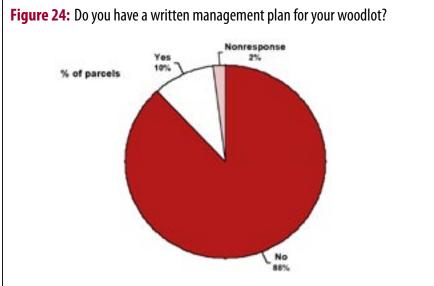
ment plan, but only 4% of those who don't plan to harvest have one. More direct understanding of the reasons owners chose not to have management plans can be garnered from Figure 25. Among those parcel owners without management plans who responded, the most common rationale given (39%) was that the owners preferred to let the forest grow "naturally". More respondents also listed this reason as "most important" (19%) than any other. Other reasons that were cited relatively often were that the trees wouldn't produce enough to justify the management cost (28%) and lack of knowledge of the subject (26%). While the majority of respondents had defined preferences that explained why they didn't actively manage their forestland, more than 10% of the parcels were owned by individuals clearly without adequate information to make decisions: the 10% who listed lack of knowledge and the 2% who listed lack of familiarity with forest management planning as their most important reasons for not having a plan.

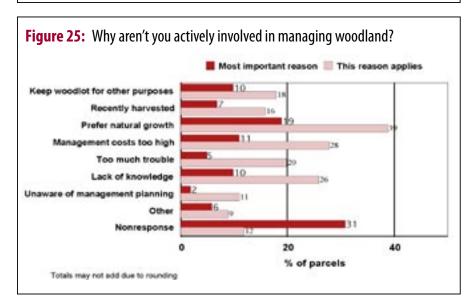
Farlier Studies

Several studies and inventories have been conducted in New York State by the U.S. Forest Service over the years. New generation surveys of forestland owners are underway with results arranged for recording at the national and multistate level. The study of most interest for purposes here is the Birch and Butler (2001) report on New York forestland for 1980 and 1994. That report divides New York State into the four regions shown in Map 2.

The current results are not strictly comparable to the Birch and Butler results, in part because the current survey excluded parcels containing less than 5 acres, whereas Birch and Butler's 1994 survey included parcels down to 1 acre. The sampling methodology also differs, with the survey data reported here drawing on tax parcels as a unit of observation while Birch and Butler worked with a photo base to develop a







point sample of forested land parcels before contacting individual landowners.

With these significant limitations in mind, we consider several statewide points of comparison with the results reported by Birch and Butler:

- In the 1994 sample, 85% of the parcels were 50 or fewer acres. In the 2005 sample, 63% of the parcels were 50 or fewer acres.
- 6% of privately owned parcels had written management plans in 1994. 10% of parcels in the 2005 sample had such plans.
- In 1994, the most common reason for owning private forest land was that it was part of the owner's residence (26%), aesthetic enjoyment (20%), and recreation (19%). In 2005, the lead response was similar, with 29% indicating that the land, most importantly, was part of the owner's primary residence. Only 12% reported that enjoyment of the environment and scenic beauty constituted the most important reason to own forestland, while a mere 11% mentioned either recreational activities or hunting and fishing as their most important reason. However, each of these reasons was in the top four mentioned by respondents as one of the reasons for owning forestland.
- In 1994, being part of a residence was the leading reason that forestland was owned in the Adirondacks, Lake Plain and Southeast regions, but "recreation" was, by far, the leading reason in the Southwest. In 2005, the Lake Plain region had a much higher percentage of parcels that were owned because they were a primary residence, whereas the Adirondacks and the Southwest regions had relatively high proportions of parcels owned for hunting and fishing or recreation.

In considering these comparisons, most of the differences between the two survey results are consistent with what might be expected from the differences in sampling strategies. For example, the exclusion of all parcels less than five acres from the 2005 sample is the most likely factor behind the lower fraction of parcels that are less than 50 acres, the higher proportion of parcels with management plans, and the lower proportion of owners who report recreational or aesthetic reasons for ownership.

The following results highlight regional variation in the 2005 sample. 10

- Median parcel size was smallest in the Southeast (24 acres) and largest in the Adirondacks (46 acres). Lake Plain (36 acres) and Southwest (40 acres) parcels fell in between.
- The smallest percentage of parcels harvested within the decade was in the Southeast (41%) and the largest percentage was in the Southwest (57%). In the Adirondacks and Lake Plain regions, 53% and 49% had been harvested respectively.
- In the Southeast, the most common reasons given for harvesting were to use the products (60%) and to improve the forest (53%). Generating a financial return ranked a distant 3rd (33%). In the Lake Plain region, the order was the same but the percentages were higher (66% harvested for own use, 57% to improve the forest, 51% financial return). In the Southwest and Adirondacks, improving forest conditions ranked first (61%/56%), followed by generating a financial return in the Southwest (55%) and own use in the Adirondacks (55%).
- In terms of the "most important reason" to harvest, the leading reason in the Southwest was financial return (28%). In the Lake Plain region it was improving forest conditions (23%). In the Adirondacks and Southeast it was producing products for the owner's use (32% and 36%).
- Land clearing was a significantly more important reason for harvesting in the Southeast than in other regions.
- Private foresters and DEC foresters were the most commonly consulted management resources in all regions. However, private foresters had been consulted regarding 36% of parcels in the Southwest, 24% in the Adirondacks, 21% in the Lake Plain region, and only

- 16% in the Southeast. Regional variation in consultation with sawmill representatives was also noticeable, ranging from a high of 11% in the Lake Plain region to a low of 4% in the Southeast.
- Contacts with parcel owners by someone interested in harvesting timber were highest in the Southwest (67%) and Adirondacks (64%) followed by the Lake Plain region (58%). They were much lower in the Southeast (48%).
- Similarly, plans to harvest were most common in the Southwest (67%) and the Adirondacks (59%), followed by the Lake Plain parcels (52%), with the smallest proportion of parcels subject to harvest plans in the Southeast (34%).
- Though not widespread anywhere, written management plans were least common in the Lake Plain region (5%), most common in the Southwest (15%), and in the middle in the Adirondacks (11%) and Southeast (10%).
- Some of the reasons given for not having a management plan varied little by region, while others did. Awareness and knowledge of forest management, for example, varied only modestly by region, being slightly higher in the Adirondacks. Land in the Southwest, on the other hand, was more likely to have been recently harvested (19%) than in the Southeast (9%), with the other two regions in the middle of this range. Owners in the Lake Plain and Southeast regions were also more likely to say harvesting wasn't worth the trouble (22%/20%) than in the Southwest (12%), with the Adirondack parcel owners in the middle (18%). The difference between the Southwest and Southeast is highlighted yet again by the difference between the 39% of parcel owners in the Southeast who prefer to let the forest grow naturally versus only 29% in the Southwest (34% in the Adirondacks, 37% in the Lake Plain region)..

The Idle Agricultural Land Follow-Up Survey

Idle agricultural land comprised at least some part of 817 parcels, or 26.5% of all parcels surveyed. However, it was listed as the predominant land use on slightly less than 10% of parcels constituting 8% of the area in the sample. A follow-up survey was sent to owners of all parcels including any idle agricultural land. A total of 448 responses (55% response rate) were returned about parcels that had a median size of 31.4 acres.

¹⁰ Chi-square tests of difference were performed on all comparisons of results by region. As a general rule, regional differences that varied by more than about 5 or 6% were statistically significant at 95% confidence levels for variables involving the entire sample. Larger differences (e.g. variations greater than about 13 to 15%) were required for differences to be significant in subsamples involving smaller numbers of observations. Details are available from the authors.

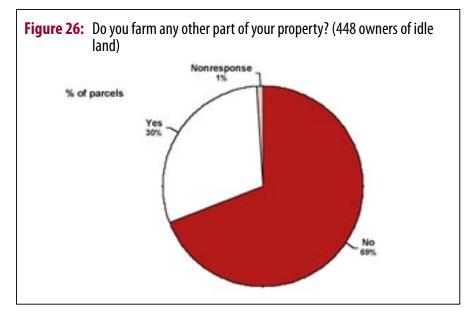


Figure 27: Do you rent any part of your property to a farmer (448 owners of idle land)

Nonresponse

Nonrespo

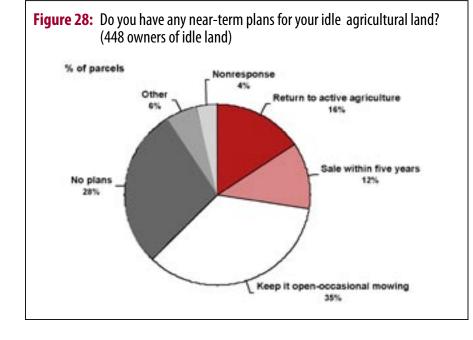
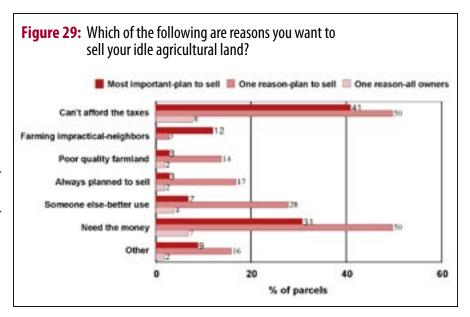


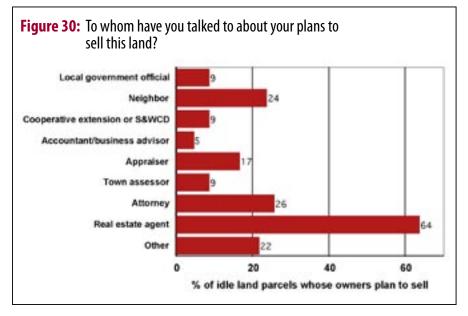
Figure 26 shows that although at least some part of the property in question was idled, owners of 30% of these parcels also farmed some land actively. It is not clear if the farmed land was on the parcel in question, or exactly what role the owner played in farming the land. However, much of the land on the parcel itself probably was farmed, if not necessarily by the owners themselves, given the observation that 36% of parcels including idle farm land also contained some actively farmed acreage. Figure 27 adds to this picture with the knowledge that only 18% of the parcels with some idle land also include some land that is rented out to farmers. Parcels with owners who said they farmed "any other part of your property" were more likely to say they rented part of their property to a farmer as well (28% of those who farmed also rented to a farmer, as opposed to 13% who didn't farm).

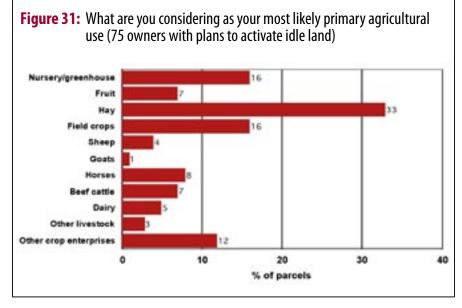
Historically, much idle farmland has been converted to housing or, more commonly, reverted to brush and then woodland. In either case, it is probably lost to agriculture. Figure 28 shows what owners of idle acreage have in mind for the future of their parcels. The most common plan, selected by well over a third (38%) of parcel owners is to maintain the land through occasional mowing. Almost as common, at 31%, were the parcels with owners who had no plans at all for the parcel. Less that one in five parcels were expected to be returned to active agricultural use. In sum, a little over half of the parcels (55%) look like they will continue to be managed either in agriculture or as open fields. Because the size of parcels doesn't vary much from 50 acres in the three largest categories, Figure 28 would look similar if the percentage of parcel acres were depicted instead of the number of parcels.

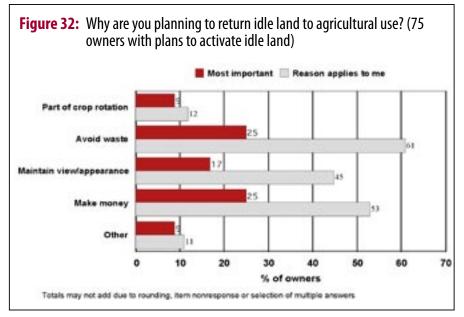
Parcels with idle farmland whose owners were anticipating selling them averaged 41 acres and were smaller than the 50 acre average for all parcels that include some idle farmland. Among the minority of all owners of idle land who were planning to sell, financial reasons shaped the dominating motivations (Figure 29). The tax burden was the leading reason given, with 41% of parcel owners saying it was the most important reason for the planned sale. Fully half of the parcel owners said that they planned to sell at least in part because they couldn't afford the taxes, a proportion equaled by the number who said they needed the money for something else. Beyond these financial factors, only the notion that "someone else could make better use of it" was a contributing factor for more than a quarter of parcel owners planning to sell.

Whether or not owners of parcels have talked to someone about selling can be an indicator of the seriousness of their intentions, as well as providing some indication of where they turn for advice about sales. Only 22% of parcels had an owner who said they planned to sell within five years but had not talked to anyone about this yet. More than a third of the parcels (35%) had owners who had talked to two or more sources about selling. As Figure 30 shows, nearly two-thirds (64%) of the small number of parcels in line to be sold were owned by someone who had already contacted a realtor. Next in rank, about the same number (a quarter) of owners had talked to either a lawyer or a neighbor. As noted above, just 17% of the parcels with idle land were on a trajectory likely to return them to active agricultural use. Owners of this small group of 75 parcels (Figure 31) most often planned to return the land to hay (33%), while about half as many (16%) were plan-









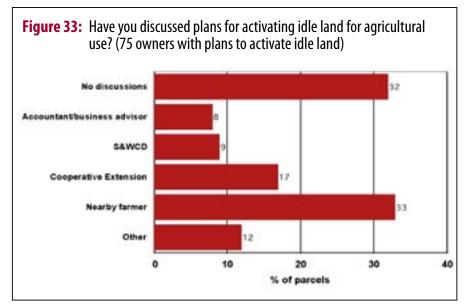


Figure 34: Have you done any library or online research about agricultural uses for idle land? (75 owners with plans to activate idle land)

% of parcels

Library research

Online research

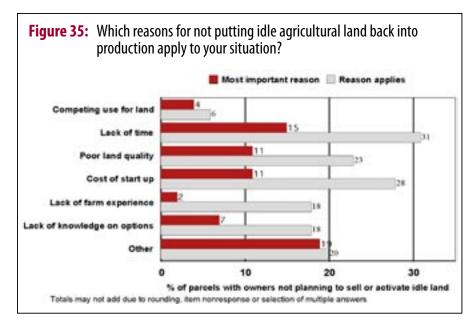
Both

ning on field crops, and 16% also planned on nursery or greenhouse production. As seen in Figure 32, very few of these parcels were idled as part of a crop rotation (12%). The other reasons most often given for returning the land to agricultural use were:

- to not let the land go to waste (61%, with 25% saying this was the most important reason)
- to make some money from the land (53%, with 25% saying this was the most important reason).
- to keep the land open for a view or appearance (45%, with 17% saying this was the most important reason).

Figure 33 shows that a substantial minority of the 75 idle farmland owners planning to turn the land back to farming had not discussed their plans with others (32%). A third had gone so far as to talk to a local farmer. Cooperative Extension was the most common institutional source to which owners (17%) had turned. Figure 34 indicates that some of the 75 owners also had used library and internet research resources, with a few more (20%) turning to online research than to the library (15%). Nevertheless, 36% of the 75 parcel owners had neither consulted anyone nor done any library or online research.

Owners of 71% of parcels with idle agricultural land on them had no plans to sell or to return the land to active agriculture. For these parcels, Figure 35 presents the reasons given for not putting the idle land back into production. Among the half-dozen reasons listed on the survey, the most frequently selected contributing factors were cost and lack of time. Poor soil or drainage was also a contributing factor for more than 20% of parcels. A basic lack of experience and lack of knowledge were each cited as contributing factors by owners of 18% of these parcels. However, when asked about the "most important" reason for not putting the land



back in farming, the leading factor was something other than any of the six reasons listed.

Finally, results about idle farmland were compared according to their location in metropolitan, micropolitan, and rural counties. There were 251, 132, and 65 responses from each of these county groupings, re-

spectively. Only minor variation by region was evident. Based on chi-square tests of significance at 95% confidence levels, no significant differences were found for questions asked of the entire sample. Some of the questions were asked about subsets of these parcels defined by their owner's intentions for future parcel use.

Nearly all differences across county groups for these questions were not statistically significant, in part because the number of parcels considered was small. Exceptions were that a) high start-up costs were cited significantly more often in rural counties as a reason for keeping farm land out of production; b) among owners planning to return idle land to farming, usage

for dairy cattle and hay was planned significantly more often for parcels in rural counties than elsewhere; and c) among owners planning to return idle land to farming, owners of idle land in metro counties were significantly more likely to consult with the Cooperative Extension Service than were owners in the other counties.

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Appendix I:

Rural Landowner Survey - Land Use Categories

The breakdown of land types follows the classification established by the New York State Office of Real Property Services (ORPS). The acreage totals for the State should be treated as approximate since there may be some variation in how local property assessors interpret the predominant use of a parcel within the ORPS land us classification system. These totals, however, are based on summation of acreage by property classification.

ORPS Property Code	Description	Total acres Statewide
100	Agricultural (not placed in any agricultural subcategory)	21,654
105	Agricultural vacant land (productivepart of an operating farm)	2,009,224
110	Livestock and products (not placed in a livestock subcategory)	164,092
111	Poultry and poultry products	11,485
112	Dairy products	1,597,942
113	Cattle, calves, hogs	309,603
114	Sheep and wool	24,233
115	Honey and beeswax	1,557
116	Other livestock (goals, sheep, donkeys)	58,212
117	Horse farms	76,347
120	Field crops	1,564,474
129	Acquired development rights (agricultural land under a conservation easement)	12,957
130	Truck crops, muckland	35,334
140	Truck crops, not muckland	46,213
150	Orchard crops (not placed in an orchard subcategory)	6,506
151	Apples, pears, peaches, cherries, etc. (tree fruits)	84,975
152	Vineyards	54,536
160	Other fruits (strawberries, cane fruits, etc.)	2,720
170	Nursery and greenhouse	25,214
180	Specialty farms (not placed in a subcategory)	1,299
181	Fur products	71
182	Pheasant, etc.	1,503
183	Aquatic (oysterlands, fish and aquatic plants)	59,661
184	Livestock (deer, moose, llamas, buffalo, etc.)	3,627
190	Fish, game and wildlife preserves	27,275
	AGRICULTURAL SUBTOTAL	6,200,714
240	Rural residence with acreage (not placed in either subcategory)	3,522,994
241	Rural residence with 10 or more acres, also used in agricultural production	334,971
242	Rural residence with 10 or more acres, recreational use	171,367
	RURAL RESIDENTIAL SUBTOTAL	4,029,332
320	Vacant land, rural (not placed in a subcategory)	154,901
321	Abandoned agricultural land (not part of an operating farm)	721,768
322	Residential vacant land over 10 acres (rural)	2,057,601
323	Other rural vacant lands (waste lands, swamps, brush, etc.)	671,729
323	VACANT LAND TOTAL	3,605,999
212		
910	Private wild and forest lands (except for hunting, fishing clubs)	2,136,678
911	Forest land under section 480 of real property law	512,201
912	Forest land under section 480a of real property law	239,110
920	Private hunting and fishing clubs	212,977
	PRIVATE FOREST LAND SUBTOTAL	3,100,966
	TOTAL FOR ALL SELECTED LAND USE CATEGORIES	16,937,011

403

Other

Appendix II: Survey Instruments



STATE OF NEW YORK DEPARTMENT OF AGRICULTURE AND MARKETS 10B AIRLINE DRIVE ALBANY, NEW YORK 12235

800-821-1276

RURAL LANDOWNER SURVEY

At the beginning of the last century, three-quarters of the State's land was in farms. Today that proportion has decreased by two-thirds. Some of the land that was once farmed has been converted to residential, commercial and industrial use, but most remains either agricultural or undeveloped. A good deal of the land that was once farmed has returned to forest.

We are gathering information on what is happening to open and forested land throughout the State. This will help us understand how management of the state's agricultural land base, open space and private forest resources is changing and is likely to change in the future.

We would greatly appreciate your taking a few minutes to fill out this survey. Comprehensive survey results will give all of the state's citizens a better understanding of the future of the New York landscape, and help state government develop policies that are supportive of wise environmental stewardship and a prosperous rural economy.

All responses to this survey will be kept strictly confidential. We will be happy to send you a summary of survey results if you check the last box on this questionnaire.

_	rcel identified above is owned by: [check one]	
001	One or more related individuals	
002	A partnership or corporation	
003	Other (Specify)	
Where	does the owner reside: [check one]	
201	On this property	
202	Not on this property, but within the same county	
203	Outside the same county, but within New York State	
204	Outside the State of New York	
In what	t year did you or your organization become the owner of this property:	
301 _		
How die	d you become the owner? [check one]	
401	Purchased	
402	Gift or Inheritance	

5)	Was the p	revious owner an active farmer?
	501	No No
	502	Yes
	503	Don't know
	30	
6)		art of this parcel been farmed in the past 10 years?
	601	No
	602	Yes
	603	Don't know
7)	Have you	sold any land that was formerly part of this parcel in the last 5 years?
	701	No
	702	Yes If Yes, was it for [check one]:
		703 Agricultural Use?
		704 Commercial or Industrial Use?
		705 Residential Use?
		706 Recreational Use?
		707 Other? (Specify)
	_	
8)		eve plans to sell land from this parcel?
	801	No, go to Question # 11 In the next 5 years? In the next 10 years?
	802	Yes, entire parcel?
	803	Yes, part of the parcel?
9)	If the ansv	wer to Question 8 is Yes, will you be most likely to sell to: [check one]
	901	A farmer
	902	A business establishment
	903	A residential developer
	904	An individual planning to build a house
	905	An individual who will reside in a house already on the property
	906	A municipal government
	907	Other (Specify)
10)	If the ones	wer to Question 8 is Yes, what is the most important reason that you will be selling
,0,		Il of this parcel? [check one]
	101	Need money from the sale
	102	Burden of property taxes on the land too high
	103	Burden of managing the land
	104	Relocation your home or business
	105	Other (Specify)

Do you allow recreational use of your property by close relatives?	y anyone other than family members and
--	--

111	No, go to Question # 13
112	Yes, continue

If the answer to Question 11 is <u>Yes</u>, please identify the uses that you permit and the limits you place on that use [check all that apply]

Recreational Use	No limits	With permission	Only on trails
Hiking	121	221	321
Horseback riding	122	222	322
Snowmobiles	123	223	323
Off-road vehicles	124	224	324
Cross-country skiing	125	225	325
Fishing	126	226	326
Hunting	127	227	327
Other	128	228	328

13) If you do not allow recreational use of your property, please rank from 1 to 4 the reasons why you do not permit others to use your land.

131	Possible law suit
132	Possible damage to property
133	Don't want strangers on land
134	Other (Specify)

14) Is your land posted?

141	No
142	Yes

15) What is the primary reason why you own this particular property? [check one]

151	Agricultural use (including all types of livestock, horse boarding, nursery / landscaping and maple)
152	Forest management / Harvesting timber
153	Location of non-agricultural business
154	Current principal residence
155	Future principal residence
156	Vacation or second home
157	Future subdivision
158	Long term investment / security
159	Hunting
160	Other recreational use
161	Rental income - from farmer
162	Rental income - other renter
163	Other (Specify)

16) Please check whether the parcel listed on the front of this questionnaire includes any of the following types of land and check the predominant land type.

	Land Type [check all that apply]	Predominant Land Type [check only one]
Forest	261	361
Brush or scrub land (No trees over 3" in diameter)	262	362
Wetlands (Streams, ponds, lakes, swamps)	263	363
Active agricultural land	264	364
Idle agricultural land	265	365
Mowed lawns and landscaped areas	266	366
Other (Specify)	267	367

We are particularly interested in land in the forest and idle agricultural land categories. We will be contacting people who have checked these items for a brief follow-up phone survey.

Please check here if you would like us to mail you a copy of a summary of all the responses from	m
people who filled out this questionnaire.	

171	No
172	Yes

Completed by:	Date:
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STATE OF NEW YORK DEPARTMENT OF AGRICULTURE AND MARKETS 108 AIRLINE DRIVE ALBANY, NEW YORK 12235 800-821-1276

RURAL LANDOWNER SURVEY Idle Agricultural Land

This survey is a follow-on to the mail survey of New York landowners conducted in December, 2004. On that report you indicated the parcel identified below contains some idle agricultural land. We have a few additional questions to help the State of New York better understand the needs of owners of this type of land. This survey will take less than ten minutes of your time.

olan to sell their idle agricularly you want to sell your idle or something else at make better use of it sell this land armland	ection C] [go to Section B] ection C] [go to section C] cultural land within the next five years die agricultural land? (Check all that apply) Not practical to tarm it because of neighbor Can't afford the taxes Other idle agricultural land? (Check one)
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	the Soil and Water Conservation District
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	the Soil and Water Conservation District A neighbor A local government official
ther business advisor	the Soil and Water Conservation District A neighbor
SI OTT	ell this land

2)	Why are you p	lanning to return the idle agricultural land	to an agriculture use	? (Check all that apply)
		Make some money from the land		It's been farmland for a long time
		Keep the land open		Other
		Not let the land go to waste		
3)	What is the m (Check one)	ost important reason you are planning t	o return the idle agrica	ultural land to an agriculture use?
	,	Make some money from the land		It's been farmland for a long time
		Keep the land open		Other
		Not let the land go to waste		
4)	Have you disc	ussed plans for agricultural use of your id applys::	tle agricultural land wit	th any of the following people?
		A farmer in your area		An accountant or other business advisor
		Someone from the Cooperative Extension S	Service	Other
		Someone from the Soil and Water Cons	AND THE RESERVE AND THE PARTY OF THE PARTY O	
5)	Have you don	e library or on-line research about agricul	tural uses for the land	?
		Library		
		On-line research		
		answers, Please SKIP TO SECTION D		ultural land to agriculture
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SECTION D:

1) Can you suggest anything the state or local government can do to help you put your idle agricultural land to the use you prefer?



STATE OF NEW YORK DEPARTMENT OF AGRICULTURE AND MARKETS 10B AIRLINE DRIVE

ALBANY, NEW YORK 12235 800-821-1276

RURAL LANDOWNER SURVEY Forest Land

This survey is a follow-on to the mail survey of New York rural landowners conducted in December, 2004. You reported that the property identified below includes some forest land. We have a few additional questions specifically designed to help the State of New York better understand the needs of woodlot and forest owners. This will take less than ten minutes of your time. Thank you for your cooperation.

	My primary residence	Enjoyment of environment, scenic beau
	Location of a vacation or second home	Hunting and fishing
	Investment	Property is a family legacy or inheritance
	Opportunity to practice forest management	Other
	Opportunity for recreational activities	
What is th	e most important reason that New Yorkers own forest la	nd (Check one)
	My primary residence	Enjoyment of environment, scenic beau
	Location of a vacation or second home	Hunting and fishing
	Investment	Property is a family legacy or inheritant
	Opportunity to practice forest management	Other
	Opportunity for recreational activities	
Have you	or a previous owner extracted, sold or out timber or firewo	od from the woodlot in the last ten years?
	Yes - Please answer question 4	
	No - Skip to question 5	
	Don't know	
Creck as	that apply) Generate a financial return	Produce products for own use (for example, firewood)
1	Pay real property taxes	Land clearing
-	Improve forest growing conditions	Other
	Improve wildlife habitat	
If the answ	ver to the above question is yes , what was the most impo	ortant reason for harvesting timber or firewood?
1000000	Generate a financial return	Produce products for own use (for example, firewood)
-	Pay real property taxes	Land clearing
_	Improve forest growing conditions	Other
1	Improve wildlife habitat	
	Improve midire natival	
	ever consulted with the any of the following about managi that apply()	ng or harvesting your woodlot?
	Private forestry consultant	Soil & Water Conservation District staff
		Logger
	DEC forester	Logger Sawmil recresentative
		Logger Sawmill representative Other

7)	Have you done library or on-line research about woodlot harvesting or management?
	Yes
	No No
8)	Have you ever been contacted by someone interested in harvesting your woodlot?
	Yes
	No No
9)	Do you plan to harvest any timber in the future?
	No Within the next 10 years
	Within the next 5 years More than 10 years out
0)	Do you have a written management plan for your woodlot?
	Yes - Skip to Question 13
	No - Please answer Question 11 and 12
	on their property. Do any of these apply to your situation?: (Check all that apply)
	Haven't heard of forest management planning
	Lack of knowledge of the subject
	Not worth the trouble
	Trees won't produce enough to justify management cost
	Prefer to let the forest grow naturally
	Recently harvested; just waiting for it to re-grow
	I keep the woodlot for something other than producing wood [Please specify]
	Other
2)	What is the most important reason some people give for not getting actively involved in managing woodland on their property? (Check one)
	Haven't heard of forest management planning
	Lack of knowledge of the subject
	Not worth the trouble
	Trees won't produce enough to justify management cost
	Prefer to let the forest grow naturally
	Recently harvested; just waiting for it to re-grow
	I keep the woodlot for something other than producing wood [Please specify]
	Other

13) Can you suggest anything that the state or local government could do to help put your forest land to the use you would prefer?