FARMING ALTERNATIVES

RESULTS OF A SURVEY OF COOPERATIVE EXTENSION FIELD STAFF REGARDING ALTERNATIVE FARMING ENTERPRISES

Leather, fur, lamb wool, trade meats, eggs, liver, blueberries, raspberries, blackberries, pumpkin, butter, cheese,信件 farms dairy, fresh white and brown sugar, poultry feed, fresh organic fish, fresh organic chicken, fresh organic lamb, goat meat, beef, dairy, orange juice, fudge, pate, liver, organ meats, chicken livers, chicken hearts.

By processing field crops, soy products, fresh meat, production for fresh grind.

Gelatin, tallow, bacon grease, barley, buckwheat, oats, pop corn, sunflowers, Indi.

Wood products: timber, wood chips, pulp, paper, shakes, floor joists, paneling, panels, veneer, hardwoods, softwoods, logs, hemlock and natural vegetation collected annually.

Manufacturing of wood products toys, balsam pillows, processed goods with organic ingredients biotech products, forest products, specialized markets, chinchilla, wood and turf dried flowers, ornamental shrubs and trees, native wildflower collection.

Garden flowers (mums, pansies, glad) bedding plants, cut flowers, vegetable garden services, yard maintenance, ground covers, container gardening hardy ornamentals, locust (for poles, seeds) processed products: cakes, sauces, cider, chocolate-covered raspberries, farm wineries, wine, wine jelly, jelly, jams.

Special recreational and other services: fishing, waterfront recreation, on-farm bed and breakfast, hay rides, anything that you can spend a day in the outdoors/hunting preserves, wine trail, horseback riding, guided tours, other farm family/household enterprises wool and yarn processing.

by
Nancy Grudens Schuck
Wayne Knoblauch
Judith Green

Department of Agricultural Economics
New York State College of Agriculture and Life Sciences
A Statutory College of the State University
Cornell University, Ithaca, New York 14853
It is the policy of Cornell University actively to support equality of educational and employment opportunity. No person shall be denied admission to any educational program or activity or be denied employment on the basis of any legally prohibited discrimination involving, but not limited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.
PREFACE

Among New York's farm and rural families there has been an increasing interest in nontraditional agricultural commodities, innovative marketing strategies, rural enterprise development and farm diversification. In 1986, Cornell Cooperative Extension and the New York State Department of Agriculture and Markets initiated the FARMING ALTERNATIVES PROJECT to provide information and programs on agricultural diversification and enterprise development.

The Farming Alternatives Project, administered by the Department of Agricultural Economics, is under the direction of John Brake (Agricultural Economics), David Gross (Natural Resources) and Wayne Knoblauch (Agricultural Economics), and a Steering Committee composed of individuals from several different departments within the Colleges of Agriculture and Life Sciences and Human Ecology. The Farming Alternatives Project is funded through the FarmNet program, College of Agriculture and Life Sciences, Cornell University. Funding for the FarmNet program was provided by the New York State Department of Agriculture and Markets.

Acknowledgments

Thanks are extended to all field staff who responded to the survey. The thoughtfulness and care with which each survey form was completed greatly increased our understanding of alternative farming ventures.

The authors also wish to thank Duncan Hilchey from the Center for Local Food and Agriculture for his assistance in compiling the survey data.

Valuable assistance in writing the survey report was received from John Brake and David Gross, both of the Farming Alternatives Project. Thanks are also extended to Jane McGonigal, College of Human Ecology, Cornell Cooperative Extension, and Robert Bruce, Department of Education, for reviewing the report and for use of their survey report material. Thanks are also expressed to members of the Farming Alternatives Project Steering Committee who reviewed and commented on the initial drafts of the report.
# Results of a Survey of Cooperative Extension Field Staff Regarding Alternative Farming Enterprises

## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>What is an Alternative Enterprise?</td>
<td>1</td>
</tr>
<tr>
<td>Survey of Cooperative Extension Field Staff</td>
<td>2</td>
</tr>
<tr>
<td>Existing Alternative Enterprises in New York State</td>
<td>2</td>
</tr>
<tr>
<td>Assessment of Interest in Farming Alternatives</td>
<td>3</td>
</tr>
<tr>
<td>Clientele: Full-time, Part-time and NonFarming</td>
<td>4</td>
</tr>
<tr>
<td>Type of Information Sought by Clientele</td>
<td>5</td>
</tr>
<tr>
<td>Obstacles to Development of Alternative Enterprises</td>
<td>6</td>
</tr>
<tr>
<td>Opportunities for Alternative Marketing Strategies</td>
<td>8</td>
</tr>
<tr>
<td>Opportunities for Development of Alternative Enterprises</td>
<td>8</td>
</tr>
<tr>
<td>Support Needs of Field Staff</td>
<td>10</td>
</tr>
<tr>
<td>Summary and Conclusions</td>
<td>12</td>
</tr>
<tr>
<td>Need for Further Research</td>
<td>13</td>
</tr>
<tr>
<td>Appendix A: Innovative Rural Enterprises Actually in Operation in New York State</td>
<td>15</td>
</tr>
<tr>
<td>Appendix B: Diversified Farms and/or Farm Conversions</td>
<td>18</td>
</tr>
</tbody>
</table>

## ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Ranking of Various Obstacles Facing Farm and Rural Entrepreneurs</td>
<td>7</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Key Opportunities for Marketing New York State Farm Products</td>
<td>9</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Importance of the Ability of Extension to Respond to Alternative Rural Enterprise Development</td>
<td>11</td>
</tr>
</tbody>
</table>
Results of a Survey of Cooperative Extension Field Staff Regarding Alternative Farming Enterprises

Nancy Grudens Schuck, Wayne Knoblauch and Judith Green

Introduction

The Farming Alternatives Project conducted a survey of New York State Cooperative Extension county agents and regional specialists as a first part of an overall effort to:

1. Identify the characteristics of alternative farm and natural resource-based enterprises and innovative marketing strategies in New York State.
2. Assess the need of farm and rural families for information on starting and managing an alternative enterprise.
3. Assess the extent to which Cooperative Extension is currently able to serve the needs of farm and rural families in the area of farm diversification and alternative enterprise and market development.
4. Identify the major research, support, and inservice education needs of Cooperative Extension field staff in the area of farming alternatives.

What is an Alternative Enterprise?

The concept of the alternative farm or natural resource-based enterprise is, we think, relatively new. Therefore, the following six categories were provided in the questionnaire to guide Cooperative Extension field staff responses.

1. Raising new or nontraditional crops, including livestock, food, fiber or forest products.
2. New, creative approaches to marketing either traditional or nontraditional agricultural or forestry products. Not included are roadside stands and farmers' markets, except where a notable innovation has been made.
3. Nontraditional services, including recreational and educational services that make use of farm, farm family or natural resources.
4. Unusual production systems such as organic, hydroponic, aquaculture, or input-reducing systems.
5. On-farm activities which add value to raw agricultural commodities, such as on-farm food processing.
6. Diversification or conversion of an existing operation.
Survey of Cooperative Extension Field Staff

In September 1986, a survey was sent to all County Coordinators and regional specialists in New York State. Forty-two of fifty-seven county offices completed the rather lengthy survey form for an excellent response rate of seventy-five percent. The County Coordinator was encouraged to involve field staff from all program areas in responding to the survey. Consequently, the responses from the forty-two counties reflect the opinions of 102 field staff. About seventy percent of the respondents were from Agricultural programs; the remainder were from Home Economics, 4-H, Natural Resources or Sea Grant.

Field staff provided valuable information on the number and types of alternative farming activities of which they had become aware through personal contact, media or word of mouth. Most importantly, survey responses enabled us to judge the magnitude and nature of requests for information made to Extension on farming alternatives. Agents and regional specialists with experience with alternative crops or marketing strategies were also identified.

Existing Alternative Enterprises in New York State

Cooperative Extension field staff estimated that an average of twelve families per county had actually attempted to develop an alternative rural enterprise within the last five years. This figure implies over 700 families throughout the State. Again, these data exclude the now-familiar roadside stands and farmers' markets. In addition, field staff provided specific information on 140 alternative or diversified operations. The complete list of those alternative enterprises noted by field staff is provided in Appendix A. Appendix B contains a list of entire farms, illustrating the many ways New York State farmers combine or change enterprises to include alternative crops, services or marketing strategies.

Reported activity varied among counties. The greatest number of alternative enterprises were reported to have been started in the Mid-Hudson Valley region, which includes the counties of Orange, Sullivan and Ulster. Interestingly, this area of high entrepreneurial activity is neither strongly rural nor urban, but instead may be described as an area where both types of economies meet. The entrepreneurial activity may have occurred because of the nearness of this region to large specialty markets and an urban populace which desires the unique services of rural enterprises, such as farmstead bed and breakfast inns. Regions which reported the least number of alternative enterprises were the North Central region (Hamilton, Herkimer, Jefferson, Lewis, Oneida and St. Lawrence counties), and the Southeast region, which includes the strongly urban counties of Nassau, Rockland and Westchester.

Of these 700 alternative rural enterprises that were developed within the last few years, field staff estimated that sixty percent were still in

---

1 The publication summarizing this information is entitled "A Directory of Cooperative Extension Field Staff with Experience in Alternative Farm Enterprises," Ag. Ec. Ext. 87-7 by Karene Andrus and Wayne Knoblauch. It is intended for use by Extension personnel. Single copies are available free from: PUBLICATIONS, Department of Agricultural Economics, Room 11 Warren Hall, Cornell University, Ithaca, NY 14853.

2 When the text refers to counties within regions, only those counties that returned survey forms are included.
business. The estimated business survival rate varied among counties as well. The highest business survival rate was reported in the Southeast region (Nassau, Rockland and Westchester counties) where there are apparently few families who begin alternative farm or woodland enterprises, but those who do seem to thrive, perhaps benefiting from the strongly urban character of the region. Average rates of success were reported in the North Central, West, Capital and Mid-Hudson Valley regions. The lowest business survival rate was reported in the East Central region, which includes the counties of Chenango, Delaware, Montgomery, and Otsego.

Assessment of Interest in Farming Alternatives

The survey also asked field staff to estimate the number of farm or rural families who were considering starting an alternative enterprise or diversifying their farm. Field staff estimated an average of thirty families per county, which is over 1,700 families statewide. The survey also asked field staff to indicate the number of calls regarding farming alternatives received in their offices during the last twelve months. Responses indicated an average of 27 requests were received for the twelve month period. Overall, over 1,600 inquiries were received last year by just those field staff participating in the survey.

Interestingly, the estimated number of families considering alternative enterprises and the number of requests for farming alternatives information received per county per year are nearly equal. These figures may be similar because field staff are primarily aware of the activities and plans of only those families who contact them. Therefore, we estimate the demand for information and educational materials relevant to farming alternatives to be generated by 1,700 families throughout the state, but consider this to be a conservative estimate.

A preliminary report of a survey of farmers conducted by Bruce and McGonigal\(^3\) of Cornell University suggests, however, that the demand for programs in this area may be much larger. The Bruce and McGonigal survey, "New York State Farm Family Data Base," was intended to gain information on farm family employment and enterprise patterns; the family's commitment to those patterns, and their educational needs. The survey was distributed in February 1986, and surveyed the farming population with gross sales greater than $10,000 through a random sample of 1,500 farm families.\(^4\) The results of the Bruce and McGonigal survey indicated that over twenty-five percent of the farming population is planning either to add or change enterprises in the future (time period unspecified). These families are likely to be interested in, and would benefit from, educational programs on evaluating options for diversification or conversion to either traditional or alternative enterprises, or adding value to production through enterprises such as on-farm processing. Therefore, using the farm population figures assumed in the study, the number of farm families in need of programs and materials in the area of farming alternatives is estimated to be approximately 3,300 families. This 3,300 figure is almost twice the figure estimated from Extension field staff responses.


\(^4\) Farm names provided by the Crop Reporting Service staff of the New York State Department of Agriculture and Markets.
Moreover, Bruce and McGonigal did not survey nonfarm rural families, who we have found are also interested in farming alternatives. Extension field staff suggest that this nonfarm subgroup comprises twenty-five percent of those families who are expressing interest in alternative enterprises (see next section). Therefore, we believe that the number of farm and nonfarm families throughout the State needing support in this area exceeds 3,300 families.

Clientele: Full-time, Part-time and Non-Farming

Of those families considering starting an alternative farming enterprise, field staff estimated that seventy-five percent were already involved in farming. Twenty-five percent of the families thought to be considering an alternative farming enterprise were presently not farming.

Of those farm families considering alternatives, approximately fifty-seven percent were thought to be operating a full-time farm that received no significant off-farm income. The remainder were thought to be operating part-time farm operations with significant contributions from off-farm income. Interestingly, the level of interest among full-time farm families is somewhat higher than might be expected. Since the proportion of full-time farm families with no off-farm income is forty-six percent statewide according to the 1982 Census of Agriculture\(^5\), one might expect that full-time farmers would be demonstrating interest in somewhat the same proportion. Yet our data indicate that full-time farmers comprise fifty-seven percent of the farm families who are showing an interest in farming alternatives. These figures suggest that full-time, mainstream farm families are demonstrating a level of interest that is at least comparable to, and perhaps surpasses, the interest shown by smaller scale, part-time farmers.

The proportions of full-time, part-time and nonfarm families considering farming alternatives were fairly uniform among counties. The distribution of full-time, part-time and nonfarm families interested in farming alternatives were:

1. Full-time with no off-farm income 40%
2. Part-time with off-farm income 35%
3. Nonfarming 25%

A few regions, however, deviated significantly from the average. The highest percentages of full-time farm families interested in farming alternatives were reported in the Capital District (Albany, Columbia and Schenectady counties), the North Central region (Hamilton, Herkimer, Jefferson, Lewis, Oneida and St. Lawrence counties), and the South Central region (Schuyler, Tioga and Tompkins counties). A high percentage in the North Central region was expected since this region has a relatively high number of full-time farmers in its resident farm population.\(^6\) The high proportion in the South Central and Capital regions is somewhat unexpected.

\(^5\)1982 Census of Agriculture Volume 1: Geographic Area Series, Part 32, New York State and County Data. United States Department of Commerce, Bureau of the Census. 1984. Pg. 42. The number of farmers in the state is 42,175. The number of full-time farmers with no off-farm income is 19,440.

\(^6\)Ibid. pgs. 164-171.
however, because these two areas have relatively fewer full-time farm families than other areas of the state.7

The region that reported the lowest percentage of full-time farm families interested in farming alternatives was the Southeast region, (Nassau, Westchester and Rockland counties) with zero percent. This low percentage is expected since these counties are strongly urban, with only one sixth of one percent of the New York State full-time farm families reported in this region.8 Low numbers of interested full-time farm families were also reported in the Northeast region, comprised of Essex, Franklin, Warren and Washington counties, with twenty-four percent.

Generally, the variation in responses among counties is unsurprising. Regions which are characterized as either strongly urban or heavily forested reported the lowest interest among full-time farmers. It was unexpected, however, that a few regions with proportionally fewer full-time farm families, such as the South Central region, would claim a relatively high interest among full-time farm families.

Type of Information Sought by Clientele

Extension personnel indicated that the most frequently received general information requests on farming alternatives were in the following categories: livestock, fruit, and horticultural crops. In addition, significant numbers of specific inquiries were received for information on alternative cash grains and vegetables, Christmas trees and aquaculture. A great diversity of other requests for information was also received including deer farming, organic production systems, growing and processing pet foods, canola, maple syrup, miniature donkeys, bed and breakfast inns and other recreational uses of farm and natural resources. There was no discernible pattern of types of requests among regions.

Field staff estimated that about half of those farmers already involved in an alternative enterprise had used the resources of Cooperative Extension at some point in the planning or development of their enterprise. The responses to this question varied greatly, however, among both individual field staff and counties.

Most field staff conjectured that rural entrepreneurs frequently approach agribusinesses and other producers for information on alternative enterprises. The complete list of the information sources field staff thought entrepreneurs used in addition to Extension are presented below in descending order.

1. Agribusiness
2. Other producers
3. Department of Environmental Conservation
4. Agricultural and forestry publications
5. Lenders

7Ibid.
8Ibid.
6. Colleges
7. Producer organizations
8. New York State Department of Agriculture and Markets
9. Resource, Conservation and Development Associations (RC&Ds)
10. Private consultants

Obstacles to Development of Alternative Enterprises

The survey asked field staff to identify obstacles to the successful development of alternative farm or natural resource-based businesses. The factor most frequently considered "usually", or "often" a problem was a "lack of marketing skills or information" among prospective entrepreneurs. Field staff thought that farm and rural entrepreneurs lack the necessary skills and information to perform important marketing functions such as:

1. Assessing wholesale or retail customer demand.
2. Deciding where to sell and how to maintain markets or customers.
3. Successfully promoting a product.

It is not surprising that marketing is considered to be the most formidable stumbling block of alternative farm enterprise development since the majority of New York State farm families have historically given more attention to the production of crops and livestock than to the marketing of those products. This is perhaps especially true in the single largest agricultural industry in New York State, the dairy industry. Dairy farmers were able to avoid performing many marketing functions in part because of the successful development of milk marketing cooperatives. Consequently, few New York State farmers have been encouraged to hone their marketing skills as sharply as their production skills. Therefore, the New York State agricultural industry as a whole has failed to develop a large repertoire of successful marketing strategies.

The second ranked obstacle to development of alternative farm enterprises was "lack of information on alternatives," such as the specific production requirements of an alternative crop. The third was "lack of general business management skills." Notably, two of these three most highly ranked obstacles are within the realm of business development and management, not production concerns.

In addition, a majority of field staff considered "lack of acceptable markets" and "poor access to commercial credit" to be important roadblocks to entrepreneurial success. Field staff considered "lack of facilities, equipment and land," "poor access to supply, service and distribution networks," and "lack of ideas and models" to be important, but less significant obstacles.

According to field staff, the least forbidding obstacles seemed to be "taxes," "Federal/State/Local regulations," and an "unsympathetic agribusiness environment." Figure 1 shows the percentage of field staff considering the various obstacles as either "usually" or "often" a problem.
Figure 1: Ranking of Various Obstacles Facing Farm and Rural Entrepreneurs

Percent of field staff considering various obstacles either "usually" or "often" a problem

- Lack of marketing skills and information
- Lack of information on alternatives
- Lack of business management skills
- Lack of acceptable markets
- Poor access to commercial credit
- Lack of facilities, equipment and land
- Poor access to supply, service and distribution networks
- Lack of ideas and models
- Taxes
- Federal/State/Local regulations
- Unsympathetic agribusiness environment
Opportunities for Alternative Marketing Strategies

What opportunities exist for establishing new markets or expanding existing markets for New York State farm products? Field staff responses suggested that the key marketing opportunity in the State was "within region" (multicounty) marketing. However, field staff responses were quite varied. The ranking of "regional marketing" expresses the only clear majority of field staff who considered this market outlet either a "major" or "significant" opportunity. The second most promising market opportunity was cooperative marketing. Tied for third place (in alphabetical order) were farmers' markets, on-farm retailing, and restaurant and specialty markets. The fourth ranked opportunity was marketing to the New York City metropolitan area.

Market outlets cited as having medium potential were the natural and organic foods markets, and local (within county) marketing. Marketing opportunities that field staff considered least important were (in descending order), mail order, on-farm processing, selling to institutions, and selling to supermarket chains.

Few regional differences appeared, except for a higher ranking of market opportunities in the New York City metropolitan area by the two regions in close proximity to this market, the Southeast and Mid-Hudson regions. The rankings of the various marketing opportunities are presented in Figure 2.

Opportunities for Development of Alternative Enterprises

Responses to the question "What types of innovative farm or natural resource-based enterprises do you think have particular growth opportunities in your county?" were extremely varied. A multitude of production opportunities was suggested by field staff, but no patterns appeared among regions, and no opportunities emerged as prominent within the State as a whole. Some examples of the opportunities noted in the survey were:

1. VEGETABLE AND FRUIT: Organic and specialty vegetables, small fruits and fresh shiitake mushrooms

2. LIVESTOCK: Rabbit, sheepskins, direct sales freezer meats, goat cheese, fallow deer, and aquaculture

3. RECREATIONAL: Farm vacations, farm tours, fishing camps and petting zoos

Shiitake mushroom: a large, dark mushroom that is the most popular mushroom in the Eastern Hemisphere and can be grown on saw logs in many areas of the United States.

Fallow deer: a small, semi-domesticated species of deer (Dama dama) raised for its fine quality venison. Can be raised in many parts of the United States.

Aquaculture: raising fish in either enclosed or open systems in farm ponds or larger, more mechanized systems.
Percent of field staff who considered various opportunities to be either "major" or "significant".

- Regional markets (with multi-county area)
- Cooperative Marketing
- Farmers Markets
- On-farm processing
- On-farm retailing
- Restaurants and specialty markets
- NYC metropolitan markets
- Local (within county) markets
- Natural and organic markets
- Mail order
- Supermarkets
- Institutions

Figure 2: Key Opportunities for Marketing New York State Farm Products
4. FOREST PRODUCTS: Balsam pillows\textsuperscript{12}, nuts, firewood and Christmas trees

It is important to note that although field staff were able to pinpoint many intriguing and potentially promising market and production opportunities, many of the respondents wrote that they were hesitant to evaluate the growth potential of many of the opportunities. Many field staff commented that more and better information was needed on the size, accessibility and practicality of particular market opportunities, and on the feasibility of the production opportunities. The question remains unanswered then, in the minds of both field and Project staff, on the relative strength of alternative market and production opportunities in New York State.

Support Needs of Field Staff

Field staff were asked "how important is it that Extension be able to respond to inquiries about alternative enterprise development?" Thirty-five percent indicated that they believed that it was "extremely important;" another thirty-five percent thought it was "considerably important" that Extension respond to clientele on this topic. Twenty-six percent rated this need "somewhat important," and only four percent rated it "not very important." The responses show that a great majority of the field staff believe Extension should offer program services to this segment of their clientele. The percentage of field staff responding in each category is illustrated in Figure 3.

When designing programs for farm and rural families who are considering development of alternative enterprises or diversification, field staff thought that most attention should be given to the following topics (in descending order):

1. Examples of successful marketing strategies
2. Business management skills
3. Promotion and advertising
4. Doing market research
5. Consumer trends

Field staff thought that less attention could be given to tax issues, regulatory issues, development of new products, and cooperative marketing. The ranking of these suggestions parallels, for the most part, the ranking of the obstacles and marketing opportunities derived from field staff responses. Cooperative marketing was the only topic ranked as highly important in the list of marketing opportunities that appears low on this list of program priorities.

To be able to offer such programs, and to be able to work individually with the farm or rural family in transition, a majority of field staff indicated that they would need additional support in the following areas (in descending order within categories):

\textsuperscript{12}Balsam pillow: bed or couch pillow, usually crafted from silks or other fine materials, and stuffed with wild or domesticated herbs and odiferous conifer leaves.
Figure 3: Importance of the Ability of Extension to Respond to Alternative Enterprises Development
1. RESEARCH NEEDS

   a. Studies of market potential for various alternative enterprises
   b. Economic feasibility studies of alternative enterprises
   c. Production information for nontraditional crops and production systems.

2. INSERVICE AGENT EDUCATION

   a. Financial management
   b. Starting a new business
   c. Determining market potential
   d. Regulations

3. RESOURCE MATERIALS

   a. A packaged program that brings together all elements of farming alternatives
   b. Listing of agents with expertise in farming alternatives
   c. Extension bulletins on marketing

A common thread linking the three categories is the call for increased attention to marketing of agricultural and natural resource goods and services. Apparently field staff are in need of research, training, and materials in this area, and cannot easily improve their efforts to work with farm and rural families developing alternative enterprises until this type of support is considerably strengthened. Field staff also indicated a need for technical information on specific farming alternatives. Particularly clear is field staff's request that the economic feasibility of specific alternative enterprises be investigated. These material and information needs of field staff should be met before the Cooperative Extension system can be expected to work comfortably and effectively with clients in the area of farm diversification and innovation.

Summary and Conclusions

A 1986 survey of NYS Cooperative Extension field staff, conducted by the Farming Alternatives Project, indicated that there is a large and underserved population of farm and rural families in need of support and educational programs in the area of farm diversification, development of alternative enterprises, and innovative marketing strategies. The survey suggested that a conservative estimate of the number of farm and rural families in New York State needing programs and information in this area is 1,700 families.

A second recent study conducted by Bruce and McGonigal of Cornell University surveyed the farming population and concluded that approximately

\[^{13}\text{Andrus, op.cit., No. 1.}\]
twenty-five percent of New York State farm families are considering either adding or changing enterprises in the near future. Using New York State Department of Agriculture and Markets population figures for farms in New York State, the number of farmers needing program support in the area of farm diversification and new enterprise development was estimated to be 3,300. This figure excludes, however, nonfarming rural families; therefore, the total number of families needing assistance in this area may be even greater than 3,300 clients.

Field staff suggested that the three most important obstacles to successful entrepreneurship were:

1. Lack of marketing skills and information
2. Lack of information on alternatives
3. Lack of business management skills

Field staff suggested many varied opportunities within the State for innovative marketing strategies. The three most promising opportunities noted were:

1. Regional (within multi-county area)
2. Cooperative marketing
3. Tied for third place (in alphabetical order)
   a. Farmers' markets
   b. Marketing to restaurant and specialty stores
   c. On-farm retailing

Field staff also suggested many production opportunities that may exist within the State, but no opportunities were identified as prominent.

Seventy percent of field staff responded that they thought it was either "extremely" or "considerably" important that Extension be able to respond to this segment of their clientele. Additional training of field staff is needed, however, before this goal can be achieved. Specific areas of research support, materials development and inservice education cited were mainly in the areas of market research and information, small farm business establishment, and production and economic analysis of various specific alternatives.

Need for Further Research

The results of this study have highlighted a few areas where further research may be warranted. Field staff called for current, detailed information on the extent and characteristics of the markets for various alternative crops. Consumer demand for various crops must be determined for specific markets to which New York State growers might reasonably sell their products. Research is also needed on the economic feasibility of producing various alternative crops, or offering various alternative services in New York State.
Moreover, field and project staff are still in need of information on the size, production requirements, problems and profitability of existing alternative farming operations. We do not know, for example, which existing alternative enterprises yield a profit, or how the net farm income of families operating alternative or diversified enterprises compares to the income of families involved in more traditional farm operations. Such information would contribute to Extension's efforts to counsel farm and nonfarm families on the likelihood of success in various types of alternative endeavors.

Through this first survey we have gained an important view of farm and rural entrepreneurs from the perspective of field staff. In order to fulfill the objectives set forth at the start of this paper, we will also need to survey entrepreneurs directly. For example, we will ask entrepreneurs to describe the ways in which Cooperative Extension has been helpful in the past, and how Cooperative Extension might be more helpful in the future. We would also benefit from knowing what information resources successful entrepreneurs relied upon during those difficult developmental years.

The Farming Alternatives Project will be addressing some of these information needs through its survey of farm and rural entrepreneurs, as well as through other projects. Many of the other research needs, however, might better be addressed by the appropriate departments at Cornell University and other institutions.
APPENDIX A

Innovative Rural Enterprises Actually in Operation
in New York State

This list is comprised of the types of enterprises noted by Cooperative Extension field staff in the survey. Enterprise types listed more than once by field staff have the frequency of occurrence listed in parenthesis next to the enterprise.

Forest Products
Christmas trees (5)
Evergreen nursery and "live Christmas trees"
Firewood
Log homes manufacturer
Maple syrup (5)

Fruit
Apples
   Apples sold retail
   Dried Apples
Blueberries (2)
   Blueberries, pick-your-own
Cider
   Fresh cider sold at farm (2)
   Fresh apple cider sold "self serve" at farm
Farm winery
Fruit processed into pies
Organically grown fruits
Other fruit sold retail (4)
Raspberries (2)
   Sold pick-your-own (2)
Strawberries (2)
   Sold pick-your-own (4)
Table grapes (2)

Grains and Field Crops
Barley (3)
Canola (rape seed) for oil
Jerusalem artichokes for human consumption and cattle feed
Lupine
   Lupine cash crop
   Lupine for cattle feed (2)
Oats (3)
Red kidney beans (2)
Soybeans processed into tofu
Sunflowers (2)
Straw (2)

Honey and processed foods
Beeswax candles
Fruit honey butters
Herb vinegars
Honey retail sale (2)
Ice cream
Livestock and Poultry

Beef
  Beef for retail freezer trade (4)
  Chemical free (organic) beef (2)
Dairy
  Young stock
Chicken
  Broilers
  Eggs
  Free range chickens
  Natural broilers
Cornish game hens
Deer
  Fallow Deer (3)
  Red Deer
Donkeys
  Miniature
Ducks
  Foie gras or pate
Goats
  Angora goats for hair (2)
  Cheese (3)
  Milk (3)
  Pygmy goats
Horses
  For Hire
Llama
  For hair
  For pack animals
  For pets and breeding stock
Rabbits
  Angora rabbits for hair (2)
  Scientific use
Sheep
  Wholesale (3)
  Lamb meat for retail freezer trade (2)
  Processed wool for the home spinning market
  Wool and skins (2)
Swine (3)

Ornamental and Nursery

Flowers
  Cut flowers suitable for drying (2)
  Field grown cut flowers (zinnias, gloriosa daisies, baby's
  breath, celosia, etc.)
  Field grown cut flowers, pick-your-own
  Greenhouse grown flowers that are marketed retail (2)
Herbs
  Bedding plants (5)
  Fresh herbs (7)
  Tree seed collection and distribution

Services
  Brokering (3)
  Cider pressing for others
  Cleaning of beans (3)
  Custom work for farmers (3)
  Custom slaughtering (5)
Delivery of eggs to homes
Educational lectures
Packing (3)
Plowing driveways for urban and rural residents
Sawmill
Trucking (2)

Tours and Recreation
Bed and breakfast inn (2)
Campground (2)
Farm motel (separate from farm house)
Farm tours (6)
Gift shop on farm
Hay rides (3)
Haunted House event at farmstand in fall
Kayak workshops and whitewater rafting and wilderness guide
Petting zoo (4)
Restaurant/snack bar on farm (5)
Walking tours with provision of pack llamas
Wine tasting (5)

Vegetables
Asparagus (2)
    Organic asparagus
Bean sprouts
Cabbage for processing
Carrots for processing
Cole crops for fresh market (2)
Cucumbers for processing
Garlic, organic
Leeks
Organically grown mixed vegetables (4)
Oriental vegetables
Peas
    Peas for processing
    Snow peas
Potatoes
    Red russet potatoes
    Sold pick-your-own
    Sweet potatoes (2)
Pumpkins and gourds sold pick-your-own (2)
Rutabagas
Specialty vegetables (2)
Sweet corn (3)
Vegetables, general
    Sold through cooperative
    Sold through farmers' market (6)
    Sold organically grown (3)
    Sold pick-your-own (3)
APPENDIX B

Diversified Farms and/or Farm Conversions that Exist in New York State

The following list represents selected alternative enterprises within New York State that were noted in the survey of Cooperative Extension field staff. Farm descriptions on this list show either the many ways farmers combine enterprises to yield a diversified operation, or conversions of a farm from a traditional enterprise to an alternative enterprise. The descriptions are brief, and in no particular order. Farm names and locations are confidential information.

PLEASE NOTE: This list DOES NOT represent all the types of alternative enterprises or farm diversification patterns that exist in the State, nor should the reader infer that the enterprises listed below are all profitable or successful.

*Dairy with mixed vegetables, Indian corn and gourds, bedding plants and hanging plants sold through farm market.

*Herbs and mixed vegetables.

*Dairy converted to maple syrup business accompanied by a pancake breakfast restaurant.

*Wholesale fruit farm converted to retail farm market that sells fruit and has coffee shop where homebaked fruit pies, donuts, etc. are sold.

*Dairy converted to a summer campground.

*Dairy that uses farm home as ski lodge in winter and farm vacation spot in summer.

*Dairy, swine and poultry farm converted to sheep, angora rabbit and angora goat farm that processes hair and fur into specialty products.

*Dairy converted to fallow deer farm.

*Dairy converted to llama, miniature donkey, and pygmy goat farm.

*Former dairy, poultry and farrow to finish swine farm now has feeder pig operation, pick-your-own strawberries and potatoes, and sells mixed vegetables through farm market.

*Farm market that sells mixed vegetables, bedding plants and has retail florist.

*Dairy that has bed and breakfast inn.

*Dairy that raises cash grains (barley, oats, canola) and straw.

*Former dairy that now raises young stock, has mixed vegetables marketed through farm market, and sells small fruits and vegetables pick-your-own.
*Dairy that has sheep and sells lamb through retail freezer trade and processes wool and skins into specialty products which are sold through on-farm store.

*Dairy that runs small motel (not using farm house).

*Former dairy that raises beef that is sold through retail freezer trade, and cuts and sells firewood.

*Dairy and crop farm that has petting zoo.

*Former dairy and crop farm that now raises oriental vegetables sold to restaurants; sunflowers sold retail, and pick-your-own strawberries.

*Mixed vegetable farm with farm market that sells field grown cut flowers pick-your-own.

*Swine farm that raises mixed vegetables for farm market, pick-your-own pumpkins, and offers farm tours for school groups.

*Farm winery that offers farm tours as well as wine tasting.

*Poultry farm that produces broilers, eggs and processes for sale to upstate markets.

*Poultry farm that processes meat into chicken patties sold wholesale.

*Poultry farm that processes eggs into deviled eggs sold wholesale.

*Poultry and hatchery that sells chicks and supplies retail.

*Dairy that raises vegetables and canola.

*Rural residents and field crop farmers with fields planted to grasses that raise pheasants for the Department of Environmental Conservation.

*Cooperative cleaning, marketing and storage of red kidney beans by several farmers.

*Processing vegetable farm converted to fresh market wholesale and retail operation, with hot house tomato production. Also raises sweet potatoes.

*Processing vegetable and grain farmer storing and packing cabbage, growing and packing red russet potatoes as well as white round types for wholesale market.

*Bean and grain farmer cleaning and brokering dry beans for other growers.

*Farmer who grows, packs and ships peas and cabbage for processing.

*Grape farmer who produces table grapes and raises mixed vegetables for wholesale fresh market.

*Herb, honey, blueberry growers and craftspeople who each have retail stores at their farms/homes and who publicize cooperatively.

*Former dairy that now raises blueberries for pick-your-own market.
* Former dairy that now raises pumpkins, ornamental corn, gourds, bakes pies and cookies, sells cider and other goods for farm tours and festivals in autumn.

* Dairy that performs custom sewing.

* Dairy and apple orchard business that processes dried apples.

* Cooperative marketing of certified organic produce by a group of organic growers.

* Poultry farm that sells eggs door to door and also produces vegetables.

* Free range poultry operation.

* Llama production for sale as pets and breeding stock, sale of hair, spun or raw, directly to consumers.

* Processing of soybeans into tofu.

* Orchard that makes cider, and will press other’s apples as well, and has a custom butcher facility.

* Beef farm that also runs a small sawmill.

* Dairy goat and veal calf farm.

* Dairy that produces maple syrup.

* Former dairy that raises organically grown grains marketed through a cooperative.

* Dairy that raises lupine as cattle feed and cash crop.

* Swine farm that gives farm tours, operates a gift shop and restaurant on farm.

* Grape producer that sells concord table grapes.

* Llamas raised and used as pack animals for campers.

* Dairy that processed yogurt; then sold cows and converted to yogurt factory alone.

* Vegetable farm that also produces herb vinegars and pesto basil sauce.

* Sheep farm with nursery and garden shop.

* Poultry farm that sells broilers, roasters and eggs from farm retail store.

* Free range poultry plus other game birds.

* Farm that raises trout for pond stocking, eggs, sweet corn, small fruits, field grown cut flowers, and produces and sells jams and chutney.

* Dairy that grows "no spray" vegetables for sale at roadside stand and produces and sells ice cream at farm.
*Choose-and-cut Christmas tree farm that gives hay rides, sells hot chocolate, and has beef cattle.

*Sheep farmer that grows containerized evergreen stock, "live Christmas trees."

*Poultry produced "naturally" sold on farm and custom slaughtered.

*Orchard that added small fruits and mixed vegetables.

*Former vegetable farmer that has vineyard and winery.