Beginning Farmer & Rancher coalition project —

Virginia Beginning Farmer & Rancher Coalition Survey Final Report





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Virginia Beginning Farmer and Rancher Coalition Project

The Virginia Beginning Farmer and Rancher Coalition Project is a collaborative effort represented by a range of beginning farmer stakeholders across the Commonwealth of Virginia: farmers (beginning and established); higher education; Cooperative Extension; non-governmental organizations; and local, state and federal government agencies. The project is housed in Virginia Tech's Department of Agricultural and Extension Education sponsored through the Beginning Farmer and Rancher Development Program of the USDA-National Institute of Food and Agriculture (Award # 2010-49400-21720). The goal of the Virginia Beginning Farmer and Rancher Coalition Project is to improve opportunities for beginning farmers and ranchers to establish and sustain viable agricultural operations in Virginia through the development and enhancement of whole farm planning programs, online resources, and farmer mentoring networks.

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Acknowledgments

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Steering Committee

The Steering Committee consists of seven committed individuals from the Coalition who represent both farmer and service provider perspectives in Virginia. This elected committee is responsible for guiding project activity to best address the expressed needs of the Coalition.

- Alvin Blaha, Laurel Farm
- Donna Westfall-Rudd, Virginia Tech
- Fidelis Okpebholo, Virginia State University
- Kim Niewolny, Virginia Tech
- Megan Seibel, Mountain View Farm and Vineyard
- Scott Sink, Hethwood Market
- Sheri Dorn, Virginia Cooperative Extension

Coalition Members

The Virginia Beginning Farmer and Rancher Coalition consists of innovative farm businesses and organizations from across the Commonwealth. These include:

- AgrAbility Virginia
- Agricultural Development Department, Fauquier County
- Appalachian Sustainable Development
- Attimo Winery
- Bracketts Farm
- Farm Service Agency (USDA)
- Fauquier Education Farm
- Grayson LandCare
- Hethwood Market
- Laurel Farm
- Local Food Hub
- Mountain View Farm and Vineyard
- Natural Resource Conversion Service (USDA)
- Rural Development (USDA)
- SustainFloyd
- Virginia Association for Biological Farming
- Virginia Cooperative Extension
- Virginia Department of Agriculture and Consumer Services
- Virginia Farm Bureau Young Farmers Program
- Virginia Farm Credit
- Virginia State University, Small Farm Outreach, Training & Technical Assistance Program
- Virginia Team Ag Ed
- Virginia Tech
- VT Earthworks
- Young Farmers of Virginia

Project Management Team

The Project Management Team is housed at Virginia Tech. This team is primarily responsible for the management and evaluation of project activity.

- Kim Niewolny, Department of Agricultural and Extension Education
- Donna Westfall-Rudd, Department of Agricultural and Extension Education
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Additional Information

Find this report at www.vabeginningfarmer.org.

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Tech's Department of Agricultural and Extension Education. The project is sponsored through the Beginning Farmer and Rancher Development Program (BFRDP) of the USDA-National Institute of Food and Agriculture (NIFA), Award # 2010-49400-21720.





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VIRGINIA -Beginning Farmer & Rancher COALITION PROJECT

www.vabeginningfarmer.org



Introduction

The goal of the Virginia beginning farmer and rancher coalition survey was to identify the educational and resource needs of Virginia's beginning farmers and ranchers, as well as its agricultural service providers. The Virginia Beginning Farmer and Rancher Coalition Project survey was designed with direct input from Virginia beginning farmers and ranchers and the service providers, including members that are part of the Coalition.

The Virginia Beginning Farmer and Rancher Coalition Project survey development process started at the end of 2010 with a thorough scan of the literature to determine if external beginning farmer and rancher survey instruments existed. Only one instrument was found which had been developed by Cornell University as part of their 2009 NIFA funded Beginning and Rancher Project. The project coordinators from Cornell were contacted for more information about their survey instrument and project. From these conversations, it was confirmed that Virginia Tech could use the Cornell instrument as a template or model framework. Cornell also provided a second instrument for additional potential questions. From these surveys, the Virginia Tech survey was developed over a period of approximately three months, from February 2011 to the end of April 2011.

The project team drafted and reviewed the survey internally several times to complete an initial draft instrument that could be shared with coalition members. From this, this instrument was shared with diverse project partners and coalition members. These organizations and individuals reviewed the survey and provided feedback, comments, and suggestions for improvements. These comments and suggestions were incorporated into further and final drafts of the survey. Content validity was assured through a review of the instrument by this panel of experts consisting of approximately 47 project coalition members from agriculture, higher education, non-profit organizations, and state agencies. Approximately fourteen individuals were asked to complete a pilot test of the instrument to ensure the online survey instrument functioned correctly. The Virginia Tech Institutional Review Board reviewed the instrument and gave approval for administration.

Survey Design

The survey instrument was finalized into a nineteen page document. The first two pages acted as an introduction to the survey with instructions for completion. The survey instrument was designed in accordance to Dillman, Smyth, and Christian (2009) into three main sections.

Section one consisted of fifty seven different items in five distinct categories. The five distinct categories items were placed into included: 1) Production Practices & Management (13 items), 2) Land Acquisition & Tenure (10 items), 3) Marketing (11 items), 4) Self-employment & Labor (9 items), and 5) Business Planning & Financial Management (14 items). Respondents were asked to rank each item on two three point scales (High, Medium, and Low). The first three point scale measured the items level of importance or priority for beginning farmer success. A lower mean item score produced a higher rating of importance / priority while a higher mean item score produced a lower level of importance / priority. The second three point scale measured current level of skill or knowledge of that item. A lower mean

item score produced a higher level of skill or knowledge for that item. A higher mean item score equals a lower level of skill or knowledge.

Section two consisted of three questions asking respondents about beginning farmer and rancher educational program delivery preferences.

Section three asked respondents about their demographics as well as other information about their farming situation. Section three classified respondents into two categories: 1) beginning farmers and ranchers, and 2) service providers. Respondents responded to a subsequent series of questions depending on their selection into one of these two subsamples.

Survey Distribution

Data collection occurred twice, the first time during the spring of 2011, and the second time during the winter of 2012. Survey distribution occurred two ways, through an online instrument, as well as through a hard copy format. The survey was available online through Qualtrics and in hard copy format during events the project team attended, through coalition member organizations, and through the project website.

Round one of the data collection process occurred during the spring of 2011 for approximately three weeks from April 28, 2011 to May 16, 2011 in accordance to Dillman, Smyth, and Christian (2009). The project director asked coalition members to help facilitate the distribution of the survey web link to obtain as many responses as possible. Coalition members that helped facilitate the survey to potential respondents included Virginia Cooperative Extension, Virginia State University, Virginia Farm Bureau, Virginia Association for Biological Farming, Catawba Sustainability Center, Team Ag Ed, Virginia Department of Agriculture & Consumer Services as well as others. Information about the survey was also posted on several agriculture and food-based listservs. Two reminders were sent to project partners and several listservs at the end of weeks one and two. The survey was also available to download from the Virginia Tech Department of Agriculture & Extension Education website.

Round two of the data collection process occurred during the winter of 2012 from approximately early January 2012 through the end of March 2012. Once again the project director asked coalition members to help facilitate the distribution of the survey web link to obtain as many responses as possible. The survey was also available in hard copy format to download from the project website.

Survey Results

All data were analyzed using the SPSS statistical package. This report is a summary of results from round one and round two of data collection.

Survey Response

During round one of data collection, 217 individuals accessed the survey web link from across Virginia to participate in the survey. Seventeen individuals who responded and clicked the web link to complete the survey did not identify themselves as part of the target population. Because of this, they were not

allowed to proceed with completing the survey. In total, during round one of data collection, two hundred individuals responded and completed the survey. This consisted of 132 individuals who identified themselves as a Virginia beginning farmer or rancher and 68 individuals who identified themselves as a Virginia service provider for beginning farmers or ranchers.

During round two of data collection, 131 individuals accessed the survey web link from across Virginia to participate in the survey. Four individuals who responded and clicked the web link to complete the survey did not identify themselves as part of the target population. Because of this, they were not allowed to proceed with completing the survey. Additionally, 12 respondents stated they had completed the survey during round one of the data collection process. Because of this, they were removed from the sample to eliminate the double counting of respondents. In total during round two of data collection, 115 individuals responded and completed the survey. This consisted of 99 individuals who identified themselves as a Virginia beginning farmer or rancher and 16 individuals who identified themselves as a Virginia service provider for beginning farmers or ranchers.

The total sample from rounds one and two of the data collection consisted of 315 respondents. This includes 231 individuals who identified themselves as a Virginia beginning farmer or rancher and 84 individuals who identified themselves as a Virginia service provider for beginning farmers or ranchers.

Because they did not complete more than 50 percent of section one of the survey, 51 respondents were eliminated from the data set. This included 30 Virginia beginning farmer and rancher respondents and 21 Virginia service provider respondents. Once this procedure was completed, this left a total of 264 respondents which were used to complete the data analysis.

Table one provides a summary of the survey respondents.

Table 1. Summary of survey respondents

Respondent	Round I Responses (n=)	Round II Responses (n=)	Total Responses (n=)	Percentage (Of Total)
Beginning farmer or rancher who lives in Virginia. (Includes: Explorer, Start-up Farmer, Establishing Farmer, or Transitioning Farmer)	116	85	201	76.1%
Service provider who works with beginning farmers or ranchers in Virginia. (Includes: agricultural professionals who provide education, information, or resource support to Virginia's beginning farmers and ranchers).	51	12	63	23.9%
Total	167	97	264	100%

Virginia Beginning Farmer & Rancher and Service Provider Respondents

Below is a summary of results from the complete sample of both Virginia beginning farmers and ranchers and Virginia service providers.

SECTION I. RANKING OF ITEMS

Level of Importance or Priority

When ranking the level of importance or priority for beginning farmer success for the "Production Practices & Management" category, respondents stated that "nutrient management & soil health" was the most important item. Below is a summary of ranking the items from the "Production Practices & Management" category.

Table 2. Priority rankings for beginning farmer success in the "Production Practices & Management" category (highest to lowest)

Rank	Item	Responses (n=264)	Mean Score
1	Nutrient management & soil health	257	1.30
2	Weed, pest, & disease management	260	1.32
3	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	256	1.55
4	Tractor and equipment handling, safety, maintenance, and repair	256	1.61
5 (tie)	Animal/livestock husbandry	255	1.68
5 (tie)	Pasture and hay land management	257	1.68
5 (tie)	Conservation Best Management Practices (BMPs)	260	1.68
8	Extending the growing season (e.g., greenhouse and high tunnel)	254	1.72
9	Food safety and Good Agricultural Practices (GAP) certification	255	1.82
10	Irrigation systems	252	1.92
11	Livestock processing capacity	252	2.14
12	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	254	2.16
13	Organic certification	256	2.22

When ranking the level of importance or priority for beginning farmer success for the "Land Acquisition & Tenure" category, respondents stated that "successful models and case studies for new farm purchases" was the most important item. Below is a summary of ranking the items from the "Land Acquisition & Tenure" category.

Table 3. Priority rankings for beginning farmer success in the "Land Acquisition & Tenure" category (highest to lowest)

Rank	Item	Responses (n=264)	Mean Score
1	Successful models and case studies for new farm purchases	244	1.62
2	Legal arrangements for land purchases and leases	240	1.63
3	Land-based business financing services	239	1.66
4	Credit for land purchase and maintenance	242	1.67
5	Land linking services between landowners and land seekers	243	1.78
6	Assistance with renting farmland	243	1.79
7	Assistance with short and long term land leases	243	1.80
8	Land conservation easements	242	1.88
9	Intergenerational farm transfers	241	1.90
10	Third-party farm transfers	235	2.23

When ranking the level of importance or priority for beginning farmer success for the "Marketing" category, respondents stated that "assessing and selecting market options" was the most important item. Below is a summary of ranking the items from the "Marketing" category.

Table 4. Priority rankings for beginning farmer success in the "Marketing" category (highest to lowest)

Rank	Item	Responses (n=264)	Mean Score
1 (tie)	Assessing and selecting market options (e.g., marketing channel assessment)	234	1.36
1 (tie)	Identifying a market niche	237	1.36
3	Product pricing	234	1.38
4	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	238	1.41
5	Marketing value-added products	237	1.53
6	Cooperatives for product marketing and distribution	238	1.59
7	Product and business branding	232	1.62
8	Internet marketing (e.g., websites and social media)	238	1.63
9	Wholesale marketing	223	1.80
10	Marketing for agritourism	224	1.96
11	Using export markets	222	2.41

When ranking the level of importance or priority for beginning farmer success for the "Self-employment & Labor" category, respondents stated that "insurance issues and regulations" was the most important item. Below is a summary of ranking the items from the "Self-employment & Labor" category.

Table 5. Priority rankings for beginning farmer success in the "Self-employment & Labor" category (highest to lowest)

Rank	Item	Responses (n=264)	Mean Score
1	Insurance issues and regulations	231	1.48
2	Farm mentor programs	229	1.64
3	Requirements and regulations associated with farm employment	230	1.68
4	Farm safety training for employees	227	1.75
5	Models for farms to pool labor and other resources	228	1.77
6	Finding and hiring the right employees	228	1.79
7	Employee management	230	1.86
8	Employee compensation strategies	227	1.94
9	Transitioning from internship/apprenticeship programs to self-employment	225	1.96

When ranking the level of importance or priority for beginning farmer success for the "Business Planning & Financial Management" category, respondents stated that "financial record keeping" was the most important item. Below is a summary of ranking the items from the "Business Planning & Financial Management" category.

Table 6. Priority rankings for beginning farmer success in the "Business Planning & Financial Management" category (highest to lowest)

Rank	Item	Responses (n=264)	Mean Score
1	Financial record keeping	226	1.21
2	Business planning	225	1.24
3	Tax planning and preparation	223	1.40
4	Financial risk management for small farms	222	1.44
5	Managing debt	221	1.49
6	Access to affordable health insurance	222	1.50
7 (tie)	Financing options	224	1.55
7 (tie)	Financing grants and low interest loans	219	1.55
9	Enterprise budgets	215	1.69
10 (tie)	Business structure options	219	1.72

10 (tie)	Cooperative equipment sharing	223	1.72
12	Government loan and loan guarantee programs	222	1.73
13	Small loan and peer to peer lending programs	223	1.77
14	Development of software tools	216	2.00

Level of Skill or Knowledge

When ranking the current level of skill or knowledge for the "Production Practices & Management" category, respondents stated that "livestock processing capacity" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Production Practices & Management" category.

Table 7. Ranking of level of skill or knowledge from the "Production Practices & Management" category (lowest to highest)

Rank	Item	Responses (n=264)	Mean Score
1	Livestock processing capacity	249	2.61
2	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	250	2.54
3	Food safety and Good Agricultural Practices (GAP) certification	255	2.46
4	Irrigation systems	252	2.43
5	Organic certification	252	2.40
6	Pasture and hay land management	257	2.36
7	Extending the growing season (e.g., greenhouse and high tunnel)	252	2.35
8	Conservation Best Management Practices (BMPs)	256	2.32
9	Animal/livestock husbandry	257	2.29
10	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	253	2.25
11	Weed, pest, & disease management	259	2.19
12	Tractor and equipment handling, safety, maintenance, and repair	259	2.19
13	Nutrient management & soil health	260	2.12

When ranking the current level of skill or knowledge for the "Land Acquisition & Tenure" category, respondents stated that "third-party farm transfers" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Land Acquisition & Tenure" category.

Table 8. Ranking of level of skill or knowledge from the "Land Acquisition & Tenure" category (lowest to highest)

Rank	Item	Responses (n=264)	Mean Score
1	Third-party farm transfers	235	2.79
2	Credit for land purchase and maintenance	239	2.67
3	Assistance with short and long term land leases	241	2.66
4 (tie)	Intergenerational farm transfers	239	2.65
4 (tie)	Land-based business financing services	241	2.65
6 (tie)	Legal arrangements for land purchases and leases	240	2.64
6 (tie)	Assistance with renting farmland	240	2.64
8	Land linking services between landowners and land seekers	241	2.59
9	Successful models and case studies for new farm purchases	242	2.48
10	Land conservation easements	242	2.46

When ranking the current level of skill or knowledge for the "Marketing" category, respondents stated that "using export markets" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Marketing" category.

Table 9. Ranking of level of skill or knowledge from the "Marketing" category (lowest to highest)

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Rank	Item	Responses (n=264)	Mean Score
1	Using export markets	218	2.80
2 (tie)	Wholesale marketing	222	2.52
2 (tie)	Marketing for agritourism	220	2.52
4	Cooperatives for product marketing and distribution	233	2.45
5	Product and business branding	231	2.39
6	Marketing value-added products	234	2.38
7	Assessing and selecting market options (e.g., marketing channel assessment)	232	2.37
8	Product pricing	230	2.30
9	Internet marketing (e.g., websites and social media)	235	2.29
10	Identifying a market niche	235	2.23
11	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	234	2.12

When ranking the current level of skill or knowledge for the "Self-employment & Labor" category, respondents stated that "models for farms to pool labor and other resources" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Self-employment & Labor" category.

Table 10. Ranking of level of skill or knowledge from the "Self-employment & Labor" category (lowest to highest)

Rank	Item	Responses (n=264)	Mean Score
1	Models for farms to pool labor and other resources	224	2.76
2	Transitioning from internship/apprenticeship programs to self-employment	222	2.67
3	Farm mentor programs	225	2.65
4	Requirements and regulations associated with farm employment	226	2.62
5	Insurance issues and regulations	227	2.59
6	Employee compensation strategies	222	2.56
7	Finding and hiring the right employees	226	2.45
8	Farm safety training for employees	224	2.37
9	Employee management	227	2.27

When ranking the current level of skill or knowledge for the "Business Planning & Financial Management" category, respondents stated that "small loan and peer to peer lending programs" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Business Planning & Financial Management" category.

Table 11. Ranking of level of skill or knowledge from the "Business Planning & Financial Management" category (lowest to highest)

Rank	Item	Responses (n=264)	Mean Score
1	Small loan and peer to peer lending programs	221	2.77
2	Cooperative equipment sharing	222	2.63
3 (tie)	Financing grants and low interest loans	222	2.62
3 (tie)	Government loan and loan guarantee programs	221	2.62
3 (tie)	Financial risk management for small farms	219	2.62
6	Access to affordable health insurance	220	2.59
7 (tie)	Development of software tools	217	2.51
7 (tie)	Tax planning and preparation	224	2.51
9	Business structure options	218	2.45
10	Enterprise budgets	217	2.40
11	Financing options	223	2.37
12	Managing debt	221	2.16
13	Business planning	224	2.12
14	Financial record keeping	224	2.00

Comparison of Top Priorities with Current Level of Skill or Knowledge

Below is a table comparing the highest priority items with the current level of knowledge or skill. The ten items bolded and colored light blue are the items respondents classified as the highest priority items but had the least knowledge or skill. In other words, these are the ten items that respondents prioritized as most important but had the least knowledge of.

Table 12. Aggregated ranking of items for all five categories

Rank	Item	Priority Mean Score (highest to lowest)	Knowledge / Skill Mean Score (corresponding score)
1	Financial record keeping	1.21	2.00
2	Business planning	1.24	2.12
3	Nutrient management & soil health	1.30	2.12
4	Weed, pest, & disease management	1.32	2.19
5	Assessing and selecting market options (e.g., marketing channel assessment)	1.36	2.37
5	Identifying a market niche	1.36	2.23
7	Product pricing	1.38	2.30
8	Tax planning and preparation	1.40	2.51
9	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	1.41	2.12
10	Financial risk management for small farms	1.44	2.62
11	Insurance issues and regulations	1.48	2.59
12	Managing debt	1.49	2.16
13	Access to affordable health insurance	1.50	2.59
14	Marketing value-added products	1.53	2.38
15	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	1.55	2.25
15	Financing options	1.55	2.37
15	Financing grants and low interest loans	1.55	2.62
18	Cooperatives for product marketing and distribution	1.59	2.45
19	Tractor and equipment handling, safety, maintenance, and repair	1.61	2.19
20	Successful models and case studies for new farm purchases	1.62	2.48
20	Product and business branding	1.62	2.39
22	Legal arrangements for land purchases and leases	1.63	2.64

22	Internet marketing (e.g., websites and social media)	1.63	2.29
24	Farm mentor programs	1.64	2.65
25	Land-based business financing services	1.66	2.65
26	Credit for land purchase and maintenance	1.67	2.67
27	Animal/livestock husbandry	1.68	2.29
27	Pasture and hay land management	1.68	2.36
27	Conservation Best Management Practices (BMPs)	1.68	2.32
30	Requirements and regulations associated with farm employment	1.68	2.62
31	Enterprise budgets	1.69	2.40
32	Extending the growing season (e.g., greenhouse and high tunnel)	1.72	2.35
32	Business structure options	1.72	2.45
32	Cooperative equipment sharing	1.72	2.63
35	Government loan and loan guarantee programs	1.73	2.62
36	Farm safety training for employees	1.75	2.37
37	Models for farms to pool labor and other resources	1.77	2.76
37	Small loan and peer to peer lending programs	1.77	2.77
39	Land linking services between landowners and land seekers	1.78	2.59
40	Assistance with renting farmland	1.79	2.64
40	Finding and hiring the right employees	1.79	2.45
42	Assistance with short and long term land leases	1.80	2.66
42	Wholesale marketing	1.80	2.52
44	Food safety and Good Agricultural Practices (GAP) certification	1.82	2.46
45	Employee management	1.86	2.27
46	Land conservation easements	1.88	2.46
47	Intergenerational farm transfers	1.90	2.65
48	Irrigation systems	1.92	2.43
49	Employee compensation strategies	1.94	2.56
50	Marketing for agritourism	1.96	2.52
50	Transitioning from internship/apprenticeship programs to self-employment	1.96	2.67
52	Development of software tools	2.00	2.51
53	Livestock processing capacity	2.14	2.61

54	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	2.16	2.54
55	Organic certification	2.22	2.40
56	Third-party farm transfers	2.23	2.79
57	Using export markets	2.41	2.80

SECTION II. EDUCATION PROGRAM DELIVERY

Approximately seventy percent of respondents (n=184) stated they most preferred one-day workshops best for educational program delivery.

Table 13. Preferences for educational program delivery (check all that apply)

Rank	Item	Responses (n=264)	Percentage
1	One-day workshop	184	69.7%
2	Online materials	159	60.2%
3	Mentoring	158	59.8%
4	Farm tours	157	59.5%
5	Online Classes/ Webinars	138	52.3%
6	Hands-on training course (approximately 4 weeks over a season on a part time basis)	134	50.8%
7	Printed materials	131	49.6%
8	Consulting	124	47.0%
9	Classroom-based short course (approximately 2-3 day course)	96	36.4%
10	Internships or apprenticeships	93	35.2%
11	Classroom-based workshop series (approximately 4 weeks over a season on a part time basis)	68	25.8%
12	Other	15	5.7%

Approximately ninety six percent of respondents stated online resources, self-help guides, and social networking would be useful forms of education or information for farmers and ranchers in Virginia (n=218). Approximately ninety six percent of respondents also stated they would personally use online resources (n=218). (Table 14 & Table 15)

Table 14. Usefulness of online resources, self-help guides, and social networking for farmers and ranchers in Virginia

Item	Responses (n=264)	Percentage
Yes	218	95.6%
No	10	4.4%
Total	228	100%

Table 15. Personally use online resources

Item	Responses (n=264)	Percentage
Yes	218	96.0%
No	9	4.0%
Total	227	100%

SECTION III. RESPONDENT INFORMATION & DEMOGRAPHICS

Table 16. Summary of survey respondents

Item	Responses (n=264)	Percentage
Beginning farmer or rancher (Includes: Explorer, Start-up Farmer, Establishing Farmer, or Transitioning Farmer)	172	75.1%
Beginning farmer and rancher service provider (Includes: Agricultural professionals who provide education, information, or resource support to Virginia's beginning farmers and ranchers).	57	24.9%
Total	229	100%

Beginning Farmer & Rancher Respondents

Below is a summary of results from strictly Virginia beginning farmer and rancher respondents.

Beginning farmer and rancher survey respondents were slightly more male (55%) (n=95) than female (45%) (n=77). Eighty nine percent of beginning farmer and rancher respondents stated they were white or Caucasian (n=150). Approximately two percent of beginning farmer and rancher respondents stated that they were African American (n=4) while approximately two percent identified themselves as Hispanic (n=3). Approximately sixty percent of beginning farmer and rancher respondents stated they were 41 years of age or older (n=100). (Table 17, Table 18, & Table 19)

Table 17. Gender of beginning farmer and rancher respondents

Item	Responses (n=172)	Percentage
Male	95	55%
Female	77	45%
Total	172	100%

Table 18. Race of beginning farmer and rancher respondents

Item	Responses (n=172)	Percentage
White/Caucasian	150	88.8%
African American	4	2.4%
Hispanic	3	1.8%
Asian	3	1.8%
Native American	4	2.4%
Pacific Islander	0	0%
Other	5	3.0%
Total	169	100%

Table 19. Age of beginning farmer and rancher respondents

Item	Responses (n=172)	Percentage
18-20 years of age	2	1.2%
20-25 years of age	11	6.5%
26-30 years of age	18	10.7%
31-35 years of age	21	12.5%
36-40 years of age	16	9.5%
41-50 years of age	40	23.8%
51-60 years of age	52	31.0%
Over 60 years of age	8	4.8%
Total	168	100%

Approximately eighty two percent of beginning farmer and rancher respondents stated they were an explorer (someone actively planning their farm entry but may not be farming as a career option yet) or start-up farmer (someone who is in their first few years of commercial agricultural production) (n=140). Eleven percent of beginning farmer and rancher respondents stated they were an establishing farmer (someone who is expanding, diversifying and/or stabilizing their farming enterprise but still within the

first 10 years of operation) (n=19). Seven percent of beginning farmer and rancher respondents stated they were a transitioning farmer (family farm members who have decision making roles on the farm without yet having primary farm operator status) (n=12). (Table 20)

Table 20. Beginning farmer and rancher respondents by farmer experience

Item	Responses (n=172)	Percentage
Explorer (someone actively planning their farm entry but may not be farming as a career option yet)	75	43.9%
Start-up Farmer (someone who is in their first few years of commercial agricultural production)	65	38.0%
Establishing Farmer (someone who is expanding, diversifying and/or stabilizing their farming enterprise but still within the first 10 years of operation)	19	11.1%
Transitioning Farmer (family farm members who have decision making roles on the farm without yet having primary farm operator status)	12	7.0%
Total	171	100%

Thirty one percent of beginning farmer and rancher respondents stated they were an explorer (someone actively planning to start farming) (n=54). Twenty five percent of beginning farmer and rancher respondents stated they had two to five years of farming experience (n=43). Seventeen percent of respondents stated they had over five years of farming experience (n=29). (Table 21)

Table 21. Beginning farmer and rancher respondents by number of years farming

Item	Responses (n=172)	Percentage
Explorer (someone actively planning to start farming)	54	31.4%
0-2 years	43	25.0%
2-5 years	46	26.7%
5-10 years	18	10.5%
Over 10 years	11	6.4%
Total	172	100%

When asked about their farming background and experience, twenty nine percent of beginning farmer and rancher respondents stated they had little or no knowledge or hands-on experience (n=50). Eleven percent of these respondents stated they had a farm internship, apprenticeship, or farmer mentor (n=18) while nine percent of respondents stated they had learned from spouse or family member (n=15). Twenty percent of beginning farmer and rancher respondents stated they had taken some classes and/or workshops in farming or agriculture (n=34), eight percent stated they have a degree in an agricultural related field (n=14), nineteen percent grew up on a farm (n=32), and approximately five percent had worked as a management level farm employee (n=8). (Table 22)

Table 22. Respondents by beginning farmer and rancher experience

Item	Responses (n=172)	Percentage
Little or no knowledge or hands-on experience	50	29.2%
Had a farm internship, apprenticeship, or farmer mentor	18	10.5%
Learned from spouse or family member	15	8.8%
Taken some classes and/or workshops in farming or agriculture	34	19.9%
Have a degree in an agricultural related field	14	8.2%
Grew up on a farm	32	18.7%
Worked as a management level farm employee	8	4.7%
Total	171	100%

The majority of beginning farmer and rancher respondents (80.9%) had fifty acres or less under production (n=135). Approximately fourteen percent of these respondents stated they had over 100 acres in production (n=24). (Table 22)

Table 23. Beginning farmer and rancher respondents by acres in production

Item	Responses (n=172)	Percentage
None (I am actively planning to start farming)	47	28.1%
Less than 2	33	19.8%
2-5 acres	20	12.0%
6-10 acres	16	9.6%
11-20 acres	5	3.0%
21-50 acres	14	8.4%
51-100 acres	8	4.8%
101-200 acres	10	6.0%
Over 200 acres	14	8.4%
Total	167	100%

From a list of check all that apply, beginning farmer and rancher respondents stated the top five commodities they were currently producing were vegetables (41.9%) (n=72), fruit (26.2%) (n=45), poultry (22.1%) (n=38), forages (19.2%) (n=33), and beef (16.3%) (n=28). With all questions that were "check all that apply", the percentages may not add up to 100%. This is because respondents could check more than one response. (Table 24)

Table 24. Beginning farmer and rancher commodities grown or produced (check all that apply)

Rank	Item	Responses (n=172)	Percentage
1	Vegetables	72	41.9%
2	Fruit	45	26.2%
3	None (I am actively planning to start farming)	44	25.6%
4	Poultry	38	22.1%
5	Forages, hay	33	19.2%
6	Beef	28	16.3%
7	Greenhouse	27	15.7%
8	Flowers	25	14.5%
9	Feed grains	14	8.1%
10 (tie)	Other Livestock	11	6.4%
10 (tie)	Nursery	11	6.4%
12 (tie)	Sheep	10	5.8%
12 (tie)	Swine	10	5.8%
14	Grains, dry beans, oil seeds for human consumption	9	5.2%
15	Equine	8	4.7%
16	Dairy	5	2.9%
17	Fiber	4	2.3%

From a list of check all that apply, the top five market outlets beginning farmer and rancher respondents are currently utilizing include farmers markets (30.2%) (n=52), home delivery (12.8%) (n=22), roadside stands (12.2%) (n=21), restaurants (11.0%) (n=19), and a livestock auction (8.7%) (n=15). (Table 25)

Table 25. Beginning farmer and rancher market outlets (check all that apply)

Rank	Item	Responses (n=172)	Percentage
1	Famers Markets	52	30.2%
2	Home Delivery	22	12.8%
3	Roadside Stand	21	12.2%
4	Restaurants	19	11.0%
5	Livestock Auction	15	8.7%
6	Commodity Markets	12	7.0%
7 (tie)	Community Supported Agriculture (CSA)	11	6.4%
7 (tie)	Wholesale Markets	11	6.4%

7 (tie)	U-Pick	11	6.4%
10	Retail Store On-farm	8	4.7%
11	Retail Store	7	4.1%
12	Marketing Coop	6	3.5%
13	Institutional Sales (e.g., farm-to-school, farm-to-hospital, farm-to-prison)	4	2.3%
14	Produce Auction	1	0.6%
	None (I am actively planning to start farming)	55	32.0%
	Other	24	14.0%

From a list of check all that apply, when asked what types of labor currently being utilized, beginning farmer and rancher respondents stated they are utilizing family (65.7%) (n=113), part-time employees (17.4%) (n=30), interns (7.6%) (n=13), and seasonal workers (7.6%) (n=13). (Table 26)

Table 26. Type of labor utilized by beginning farmer and rancher respondents (check all that apply)

	Table 201 Type of labor delized by beginning farmer and rationer respondents (encor an enac appry)			
Rank	Item	Responses (n=172)	Percentage	
1	Family	113	65.7%	
2	None	37	21.5%	
3	Part-time	30	17.4%	
4 (tie)	Interns	13	7.6%	
4 (tie)	Seasonal	13	7.6%	
6	Full-time	9	5.2%	
7	Migrant	6	3.5%	

Approximately eighty percent of beginning farmer and rancher respondents stated there farm setting is rural (n=134) while approximately fourteen percent said suburban (n=24), and six percent stated urban (n=10). (Table 27)

Table 27. Farm settings of beginning farmer and rancher respondents

Item	Responses (n=172)	Percentage
Urban	10	6.0%
Suburban	24	14.3%
Rural	134	79.8%
Total	168	100%

Approximately eighty percent of beginning farmer and rancher respondents stated their primary market is between 0 and 25 miles (n=88). Approximately seventeen percent of these respondents stated their primary market is between 26 and 100 miles (n=19). (Table 28)

Table 28. Location of primary markets for beginning farmer and rancher respondents

Item	Responses (n=172)	Percentage
I sell my products at my farm.	16	14.5%
0 to 15 Miles	45	40.9%
16-25 Miles	27	24.5%
26-49 Miles	12	10.9%
50-100 Miles	7	6.4%
101-150 Miles	0	0%
151-200 Miles	1	0.9%
200+ Miles	2	1.8%
Total	110	100%

Service Provider Respondents

Below is a summary of results from strictly Virginia service provider respondents.

From a list of check all that apply, fifty eight percent of beginning farmer and rancher service provider respondents stated their clients are explorers (someone actively planning to start farming) (n=33). Sixty percent of these respondents stated their clients have zero to two years of farming experience (n=34). Sixty seven percent of respondents stated their clients have two to five years of farming experience (n=38). Seventy two percent of respondents stated their clients have five to ten years of farming experience (n=41). Sixty seven percent of these respondents stated their clients have over ten years of farming experience (n=38). (Table 29)

Table 29. Clients of beginning farmer and rancher service providers (check all that apply)

Item	Responses (n=57)	Percentage
Explorer (someone actively planning to start farming)	33	57.9%
0-2 years of farming experience	34	59.6%
2-5 years of farming experience	38	66.7%
5-10 years of farming experience	41	71.9%
Over 10 years of farming experience	38	66.7%

From a list of check all that apply, the top five types of farms beginning farmer service provider respondents are providing support to include specialty crop farmers (78.9%) (n=45), limited resource farmers (66.7%) (n=38), livestock farmers (64.9%) (n=37), diversified crop-livestock farmers (59.6%) (n=34), and transitioning farmers (57.9%) (n=33). (Table 30)

Table 30. Types of farmers of beginning farmer and rancher service providers (check all that apply)

Rank	Item	Responses (n=57)	Percentage
1	Specialty Crop Farmers	45	78.9%
2	Limited Resource Farmers	38	66.7%
3	Livestock Farmers	37	64.9%
4	Diversified Crop-Livestock Farmers	34	59.6%
5	Transitioning Farmers	33	57.9%
6	Minority Farmers	32	56.1%
7	Women Farmers	31	54.4%
8	Commodity Grain Farmers	24	42.1%
9	Migrant Farm Laborers & Farmers	13	22.8%
10	Immigrant/Refugee Farmers	11	19.3%
11	Other (please specify)	7	12.3%

Forty one percent of service provider respondents stated they work for Cooperative Extension (n=23). Approximately eighteen percent of respondents stated they work for a non-profit organization (n=10). Approximately twenty percent of service provider respondents also stated they work for local government (n=11). Nine percent of service provider respondents stated they work for a higher education organization (n=5). (Table 31)

Table 31. Place of employment of beginning farmer and rancher service providers

Item	Responses (n=57)	Percentage
Cooperative Extension	23	41.1%
Non-profit Organization	10	17.9%
Government Organization	11	19.6%
Higher Education Organization	5	8.9%
Secondary Education (e.g., high school)	1	1.8%
Other (please specify organization type)	6	10.7%
Total	56	100%

From a list of check all that apply, sixty one percent of beginning farmer and rancher service provider respondents stated they provide information to beginning farmers about "Production Practices and Management" (n=35) and a "Combination of Issues" (n=35). Fifty four percent of respondents stated they provide information to beginning farmers about "Marketing" (n=31). Forty seven percent of these respondents stated they provide information to beginning farmers about "Business Planning and Financial Management" (n=27). Twenty five percent of respondents stated they provide information to beginning farmers about "Land Acquisition and Tenure" (n=14). Eighteen percent of respondents stated they provide information to beginning farmers about "Self-employment and Labor" (n=10). (Table 32)

Table 32. Information categories beginning farmer and rancher service providers provide support to (check all that apply)

Rank	Item	Responses (n=57)	Percentage
1 (tie)	Combination of issues	35	61.4%
1 (tie)	Production Practices and Management	35	61.4%
3	Marketing Options	31	54.4%
4	Business Planning and Financial Management	27	47.4%
5	Land Acquisition and Tenure	14	24.6%
6	Self-employment and Labor	10	17.5%
7	Other (please specify)	3	5.3%

The top five activities beginning farmer and rancher service provider respondents use to support beginning farmers include training / workshops / conferences (71.9%) (n=41), printed materials, videos, informational resource CDs (64.9%) (n=37), consulting (59.6%) (n=34), online materials (40.4%) (n=23), and educational development tools such as curricula, lessons, and train-the-trainer (33.3%) (n=19). (Table 33)

Table 33. Beginning farmer and rancher service provider activities (check all that apply)

Rank	Item	Responses (n=57)	Percentage
1	Training/Workshops/Conferences	41	71.9%
2	Printed Materials, Videos, Informational Resource CDs	37	64.9%
3	Consulting	34	59.6%
4	Online Materials	23	40.4%
5	Educational Development (Curricula, Lessons, Train-the- Trainer)	19	33.3%
6	Online Classes/Webinars	7	12.3%
7	Mentorship Training	5	8.8%
8 (tie)	Farm Incubator Programming	4	7.0%

8 (tie)	Land Link Service (Matching Landowners with Land Seekers)	4	7.0%
10	Apprentice Training	3	5.3%
	Other (please specify)	6	10.5%

Approximately fifty four percent of respondents stated they were county-based service providers (n=31). Forty six percent of these respondents stated they were regionally based (n=26), while forty four percent of these respondents stated they were state based (n=25). (Table 34)

Table 34. Service territory of beginning farmer and rancher service providers (check all that apply)

Rank	Item	Responses (n=57)	Percentage
1	County-based	31	54.4%
2	Regionally	26	45.6%
3	Statewide	25	43.9%
4	Online	8	14.0%
5	Other (please specify)	4	7.0%

Virginia Beginning Farmer & Rancher Respondents

Below is a summary of results from strictly Virginia beginning farmer and rancher respondents.

SECTION I. RANKING OF ITEMS

Level of Importance or Priority

When ranking the level of importance or priority for beginning farmer success for the "Production Practices & Management" category, beginning farmer respondents stated that "nutrient management & soil health" was the most important item. Below is a summary of ranking the items from the "Production Practices & Management" category.

Table 35. Priority rankings for beginning farmer success in the "Production Practices & Management" category (highest to lowest)

Rank	Item	Responses (n=201)	Mean Score
1	Nutrient management & soil health	195	1.26
2	Weed, pest, & disease management	199	1.28
3	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	195	1.51
4	Tractor and equipment handling, safety, maintenance, and repair	194	1.62
5	Pasture and hay land management	195	1.66
6	Conservation Best Management Practices (BMPs)	199	1.68
7	Animal/livestock husbandry	195	1.71
8	Extending the growing season (e.g., greenhouse and high tunnel)	194	1.73
9	Food safety and Good Agricultural Practices (GAP) certification	195	1.82
10	Irrigation systems	193	1.90
11	Livestock processing capacity	192	2.20
12	Organic certification	195	2.21
13	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	192	2.24

When ranking the level of importance or priority for beginning farmer success for the "Land Acquisition & Tenure" category, beginning farmer respondents stated that "land-based business financing services" was the most important item. Below is a summary of ranking the items from the "Land Acquisition & Tenure" category.

Table 36. Priority rankings for beginning farmer success in the "Land Acquisition & Tenure" category (highest to lowest)

Rank	Item	Responses (n=201)	Mean Score
1	Land-based business financing services	182	1.64
2	Credit for land purchase and maintenance	184	1.68
3 (tie)	Successful models and case studies for new farm purchases	185	1.69
3 (tie)	Legal arrangements for land purchases and leases	183	1.69
5	Land linking services between landowners and land seekers	184	1.80
6 (tie)	Assistance with renting farmland	185	1.87
6 (tie)	Land conservation easements	183	1.87
8	Assistance with short and long term land leases	185	1.89
9	Intergenerational farm transfers	183	2.02
10	Third-party farm transfers	178	2.29

When ranking the level of importance or priority for beginning farmer success for the "Marketing" category, beginning farmer respondents stated that "product pricing" was the most important item. Below is a summary of ranking the items from the "Marketing" category.

Table 37. Priority rankings for beginning farmer success in the "Marketing" category (highest to lowest)

Rank	Item	Responses (n=201)	Mean Score
1	Product pricing	178	1.34
2	Identifying a market niche	180	1.35
3	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	182	1.37
4	Assessing and selecting market options (e.g., marketing channel assessment)	177	1.39
5	Marketing value-added products	180	1.54
6	Cooperatives for product marketing and distribution	181	1.56
7	Product and business branding	177	1.58
8	Internet marketing (e.g., websites and social media)	181	1.60
9	Wholesale marketing	176	1.85
10	Marketing for agritourism	176	1.97
11	Using export markets	174	2.45

When ranking the level of importance or priority for beginning farmer success for the "Self-employment & Labor" category, beginning farmer respondents stated that "insurance issues and regulations" was the most important item. Below is a summary of ranking the items from the "Self-employment & Labor" category.

Table 38. Priority rankings for beginning farmer success in the "Self-employment & Labor" category (highest to lowest)

Rank	Item	Responses (n=201)	Mean Score
1	Insurance issues and regulations	178	1.49
2	Farm mentor programs	176	1.61
3	Requirements and regulations associated with farm employment	177	1.73
4	Farm safety training for employees	174	1.77
5	Models for farms to pool labor and other resources	176	1.82
6	Finding and hiring the right employees	175	1.85
7	Employee management	177	1.92
8	Employee compensation strategies	175	1.97
9	Transitioning from internship/apprenticeship programs to self-employment	172	2.02

When ranking the level of importance or priority for beginning farmer success for the "Business Planning & Financial Management" category, beginning farmer respondents stated that "financial record keeping" was the most important item. Below is a summary of ranking the items from the "Business Planning & Financial Management" category.

Table 39. Priority rankings for beginning farmer success in the "Business Planning & Financial Management" category (highest to lowest)

Rank	Item	Responses (n=201)	Mean Score
1	Financial record keeping	173	1.23
2	Business planning	172	1.24
3	Tax planning and preparation	170	1.39
4	Financial risk management for small farms	169	1.45
5	Managing debt	169	1.53
6 (tie)	Financing grants and low interest loans	168	1.54
6 (tie)	Access to affordable health insurance	170	1.54
8	Financing options	172	1.59
9	Cooperative equipment sharing	173	1.69

10	Government loan and loan guarantee programs	171	1.70
11	Business structure options	168	1.71
12 (tie)	Enterprise budgets	164	1.76
12 (tie)	Small loan and peer to peer lending programs	172	1.76
14	Development of software tools	165	1.96

Level of Skill or Knowledge

When ranking the current level of skill or knowledge for the "Production Practices & Management" category, beginning farmer respondents stated that "livestock processing capacity" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Production Practices & Management" category.

Table 40. Ranking of level of skill or knowledge from the "Production Practices & Management" category (lowest to highest)

Rank	Item	Responses (n=201)	Mean Score
1	Livestock processing capacity	191	2.71
2	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	190	2.65
3	Food safety and Good Agricultural Practices (GAP) certification	196	2.54
4	Organic certification	193	2.51
5 (tie)	Pasture and hay land management	197	2.49
5 (tie)	Irrigation systems	194	2.49
7	Conservation Best Management Practices (BMPs)	196	2.47
8	Extending the growing season (e.g., greenhouse and high tunnel)	194	2.44
9	Animal/livestock husbandry	197	2.39
10	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	196	2.33
11	Weed, pest, & disease management	199	2.30
12	Nutrient management & soil health	195	2.22
13	Tractor and equipment handling, safety, maintenance, and repair	194	2.19

When ranking the current level of skill or knowledge for the "Land Acquisition & Tenure" category, beginning farmer respondents stated that "third-party farm transfers" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Land Acquisition & Tenure" category.

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Table 41. Ranking of level of skill or knowledge from the "Land Acquisition & Tenure" category (lowest to highest)

Rank	Item	Responses (n=201)	Mean Score
1	Third-party farm transfers	179	2.86
2	Assistance with renting farmland	183	2.79
3	Assistance with short and long term land leases	184	2.77
4	Credit for land purchase and maintenance	182	2.76
5	Intergenerational farm transfers	182	2.75
6	Legal arrangements for land purchases and leases	183	2.73
7	Land-based business financing services	184	2.72
8	Land linking services between landowners and land seekers	184	2.65
9	Land conservation easements	184	2.55
10	Successful models and case studies for new farm purchases	185	2.54

When ranking the current level of skill or knowledge for the "Marketing" category, beginning farmer respondents stated that "using export markets" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Marketing" category.

Table 42. Ranking of level of skill or knowledge from the "Marketing" category (lowest to highest)

Rank	Item	Responses (n=201)	Mean Score
1	Using export markets	172	2.88
2	Marketing for agritourism	174	2.62
3	Wholesale marketing	176	2.61
4	Cooperatives for product marketing and distribution	179	2.55
5	Assessing and selecting market options (e.g., marketing channel assessment)	177	2.48
6	Marketing value-added products	179	2.47
7	Product and business branding	176	2.43
8	Product pricing	177	2.35
9	Identifying a market niche	180	2.34
10	Internet marketing (e.g., websites and social media)	180	2.32
11	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	179	2.22

When ranking the current level of skill or knowledge for the "Self-employment & Labor" category, beginning farmer respondents stated that "models for farms to pool labor and other resources" had the

lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Self-employment & Labor" category.

Table 43. Ranking of level of skill or knowledge from the "Self-employment & Labor" category (lowest to highest)

Rank	Item	Responses (n=201)	Mean Score
1	Models for farms to pool labor and other resources	175	2.81
2	Farm mentor programs	175	2.74
3	Transitioning from internship/apprenticeship programs to self-employment	172	2.71
4	Requirements and regulations associated with farm employment	175	2.67
5 (tie)	Employee compensation strategies	172	2.62
5 (tie)	Insurance issues and regulations	177	2.62
7	Finding and hiring the right employees	175	2.47
8	Farm safety training for employees	173	2.46
9	Employee management	177	2.31

When ranking the current level of skill or knowledge for the "Business Planning & Financial Management" category, beginning farmer respondents stated that "small loan and peer to peer lending programs" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Business Planning & Financial Management" category.

Table 44. Ranking of level of skill or knowledge from the "Business Planning & Financial Management" category (lowest to highest)

Rank	Item	Responses (n=201)	Mean Score
1	Small loan and peer to peer lending programs	171	2.81
2	Government loan and loan guarantee programs	170	2.74
3	Financing grants and low interest loans	170	2.72
4 (tie)	Cooperative equipment sharing	172	2.70
4 (tie)	Financial risk management for small farms	168	2.70
6	Access to affordable health insurance	168	2.60
7	Development of software tools	167	2.54
8	Enterprise budgets	166	2.52
9	Tax planning and preparation	173	2.51
10	Business structure options	166	2.50
11	Financing options	172	2.47

12	Managing debt	169	2.20
13	Business planning	173	2.19
14	Financial record keeping	172	2.06

Comparison of Top Priorities with Current Level of Skill or Knowledge

Below is a table comparing the highest priority items with the current level of knowledge or skill as prioritized by beginning farmer respondents. The eleven items bolded and colored light blue are the items beginning farmer respondents classified as the highest priority items but had the least knowledge or skill. In other words, these are the ten items that beginning farmer respondents prioritized as most important but had the least knowledge of.

Table 45. Aggregated ranking of items for all five categories

Rank	Item	Priority Mean Score (highest to lowest)	Knowledge / Skill Mean Score (corresponding score)	
1	Financial record keeping	1.23	2.06	
2	Business planning	1.24	2.19	
3	Nutrient management & soil health	1.26	2.22	
4	Weed, pest, & disease management	1.28	2.30	
5	Product pricing	1.34	2.35	
6	Identifying a market niche	1.35	2.34	
7	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	1.37	2.22	
8 (tie)	Assessing and selecting market options (e.g., marketing channel assessment)	1.39	2.48	
8 (tie)	Tax planning and preparation	1.39	2.51	
10	Financial risk management for small farms	1.45	2.70	
11	Insurance issues and regulations	1.49	2.62	
12	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	1.51	2.33	
13	Managing debt	1.53	2.20	
14 (tie)	Marketing value-added products	1.54	2.47	
14 (tie)	Financing grants and low interest loans	1.54	2.72	
14 (tie)	Access to affordable health insurance	1.54	2.60	
17	Cooperatives for product marketing and distribution	1.56	2.55	
18	Product and business branding	1.58	2.43	

19	Financing options	1.59	2.47
20	Internet marketing (e.g., websites and social media)	1.60	2.32
21	Farm mentor programs	1.61	2.74
22	Tractor and equipment handling, safety, maintenance, and repair	1.62	2.19
23	Land-based business financing services	1.64	2.72
24	Pasture and hay land management	1.66	2.49
25 (tie)	Conservation Best Management Practices (BMPs)	1.68	2.47
25 (tie)	Credit for land purchase and maintenance	1.68	2.76
27 (tie)	Successful models and case studies for new farm purchases	1.69	2.54
27 (tie)	Legal arrangements for land purchases and leases	1.69	2.73
27 (tie)	Cooperative equipment sharing	1.69	2.70
30	Government loan and loan guarantee programs	1.70	2.74
31 (tie)	Animal/livestock husbandry	1.71	2.39
31 (tie)	Business structure options	1.71	2.50
33 (tie)	Extending the growing season (e.g., greenhouse and high tunnel)	1.73	2.44
33 (tie)	Requirements and regulations associated with farm employment	1.73	2.67
35 (tie)	Enterprise budgets	1.76	2.52
35 (tie)	Small loan and peer to peer lending programs	1.76	2.81
37	Farm safety training for employees	1.77	2.46
38	Land linking services between landowners and land seekers	1.80	2.65
39 (tie)	Food safety and Good Agricultural Practices (GAP) certification	1.82	2.54
39 (tie)	Models for farms to pool labor and other resources	1.82	2.81
41 (tie)	Wholesale marketing	1.85	2.61
41 (tie)	Finding and hiring the right employees	1.85	2.47
43 (tie)	Assistance with renting farmland	1.87	2.79
43 (tie)	Land conservation easements	1.87	2.55
45	Assistance with short and long term land leases	1.89	2.77
46	Irrigation systems	1.90	2.49
47	Employee management	1.92	2.31
48	Development of software tools	1.96	2.54
49 (tie)	Marketing for agritourism	1.97	2.62

49 (tie)	Employee compensation strategies	1.97	2.62
51 (tie)	Intergenerational farm transfers	2.02	2.75
51 (tie)	Transitioning from internship/apprenticeship programs to self-employment	2.02	2.71
53	Livestock processing capacity	2.20	2.71
54	Organic certification	2.21	2.51
55	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	2.24	2.65
56	Third-party farm transfers	2.29	2.86
57	Using export markets	2.45	2.88

Beginning Farmer and Rancher Priorities by Farmer Subgroup

Within the survey instrument, beginning farmers were asked to classify themselves by years of farming experience. Below is a breakdown of the top priorities by each of the four beginning farmer sub-groups.

For "explorer farmers," the top priority was found to be "business planning" with a mean score of 1.18. Four of the top ten priority items were found to be from the "Marketing" category. Three of the top ten priority items were found to be from the "Business Planning and Financial Management" category and three of the top ten priority items were found to be from the "Production Practices and Management" category.

Table 46. Top ten priorities for explorer farmer respondents

Rank	Item	Category	Responses (n=75)	Mean Score
1	Business planning	Business Planning and Financial Management	73	1.18
2	Financial record keeping	Business Planning and Financial Management	73	1.22
3	Weed, pest, & disease management	Production Practices and Management	74	1.24
4	Nutrient management & soil health	Production Practices and Management	71	1.28
5 (tie)	Assessing and selecting market options (e.g., marketing channel assessment)	Marketing	73	1.32
5 (tie)	Direct marketing (e.g., farmer's market, road-side stand, on-farm sales, U-pick, etc.)	Marketing	74	1.32
7	Tax planning and preparation	Business Planning and Financial Management	71	1.34
8 (tie)	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	Production Practices and Management	73	1.36
8 (tie)	Product pricing	Marketing	73	1.36

10 Identifying a market niche Marketing 73	1.40	
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For "startup farmers," the top priority was found to be "financial record keeping" with a mean score of 1.26. Five of the top ten priority items were found to be from the "Marketing" category.

Table 47. Top ten priorities for startup farmer respondents

Rank	Item	Category	Responses (n=65)	Mean Score
1	Financial record keeping	Business Planning and Financial Management	65	1.26
2	Nutrient management & soil health	Production Practices and Management	64	1.27
3	Weed, pest, & disease management	Production Practices and Management	65	1.29
4	Product pricing	Marketing	64	1.31
5 (tie)	Identifying a market niche	Marketing	64	1.33
5 (tie)	Business planning	Business Planning and Financial Management	64	1.33
7	Direct marketing (e.g., farmer's market, road-side stand, on-farm sales, U-pick, etc.)	Marketing	64	1.36
8	Assessing and selecting market options (e.g., marketing channel assessment)	Marketing	62	1.37
9 (tie)	Internet marketing (e.g., websites and social media)	Marketing	64	1.48
9 (tie)	Tax planning and preparation	Business Planning and Financial Management	65	1.48

For "establishing farmers," the top priority was found to be "financial record keeping" with a mean score of 1.16. Four of the top ten priority items were found to be from the "Business Planning & Financial Management" category.

Table 48. Top ten priorities for establishing farmer respondents

Rank	Item	Category	Responses (n=19)	Mean Score
1	Financial record keeping	Business Planning and Financial Management	19	1.16
2	Business planning	Business Planning and Financial Management	19	1.26
3	Weed, pest, & disease management	Production Practices and Management	18	1.28
4	Nutrient management & soil health	Production Practices and Management	18	1.28

5	Product pricing	Marketing	16	1.31
6	Identifying a market niche	Marketing	19	1.32
7	Direct marketing (e.g., farmer's market, road-side stand, on-farm sales, U-pick, etc.)	Marketing	19	1.37
8 (tie)	Financial risk management for small farms	Business Planning and Financial Management	18	1.39
8 (tie)	Tax planning and preparation	Business Planning and Financial Management	18	1.39
10	Insurance issues and regulations	Self-employment and Labor	18	1.44

For "transitioning farmers," five of the top ten priority items were found to be from the "Business Planning & Financial Management" category. Four items all from the "Business Planning & Financial Management" category were found to be the top priorities with a mean score of 1.0.

Table 49. Top ten priorities for transitioning farmer respondents

Rank	Item	Category	Responses (n=12)	Mean Score
1 (tie)	Financial record keeping	Business Planning and Financial Management	12	1.00
1 (tie)	Business planning	Business Planning and Financial Management	12	1.00
1 (tie)	Managing debt	Business Planning and Financial Management	12	1.00
1 (tie)	Financial risk management for small farms	Business Planning and Financial Management	12	1.00
5 (tie)	Nutrient management & soil health	Production Practices and Management	12	1.08
5 (tie)	Identifying a market niche	Marketing	12	1.08
5 (tie)	Tax planning and preparation	Business Planning and Financial Management	12	1.08
8	Tractor and equipment handling, safety, maintenance, and repair	Production Practices and Management	11	1.09
9 (tie)	Weed, pest, & disease management	Production Practices and Management	12	1.17
9 (tie)	Legal arrangements for land purchases and leases	Land Acquisition and Tenure	12	1.17

Virginia Service Provider Respondents

Below is a summary of results from strictly Virginia service provider respondents.

SECTION I. RANKING OF ITEMS

Level of Importance or Priority

When ranking the level of importance or priority for beginning farmer success for the "Production Practices & Management" category, service provider respondents stated that "nutrient management & soil health" was the most important item. Below is a summary of ranking the items from the "Production Practices & Management" category.

Table 50. Priority rankings for beginning farmer success in the "Production Practices & Management" category (highest to lowest)

Rank	Item	Responses (n=63)	Mean Score
1	Nutrient management & soil health	62	1.42
2	Weed, pest, & disease management	61	1.44
3	Tractor and equipment handling, safety, maintenance, and repair	62	1.58
4	Animal/livestock husbandry	60	1.60
5	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	61	1.66
6	Extending the growing season (e.g., greenhouse and high tunnel)	60	1.68
7	Conservation Best Management Practices (BMPs)	61	1.69
8	Pasture and hay land management	62	1.76
9	Food safety and Good Agricultural Practices (GAP) certification	60	1.83
10	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	62	1.90
11	Livestock processing capacity	60	1.93
12	Irrigation systems	59	2.00
13	Organic certification	61	2.28

When ranking the level of importance or priority for beginning farmer success for the "Land Acquisition & Tenure" category, service provider respondents stated that "successful models and case studies for new farm purchases" was the most important item. Below is a summary of ranking the items from the "Land Acquisition & Tenure" category.

Table 51. Priority rankings for beginning farmer success in the "Land Acquisition & Tenure" category (highest to lowest)

Rank	Item	Responses (n=63)	Mean Score
1	Successful models and case studies for new farm purchases	59	1.41
2	Legal arrangements for land purchases and leases	57	1.46
3 (tie)	Intergenerational farm transfers	58	1.52
3 (tie)	Assistance with renting farmland	58	1.52
3 (tie)	Assistance with short and long term land leases	58	1.52
6	Credit for land purchase and maintenance	58	1.62
7	Land linking services between landowners and land seekers	59	1.69
8	Land-based business financing services	57	1.70
9	Land conservation easements	59	1.92
10	Third-party farm transfers	57	2.05

When ranking the level of importance or priority for beginning farmer success for the "Marketing" category, service provider respondents stated that "assessing and selecting market options" was the most important item. Below is a summary of ranking the items from the "Marketing" category.

Table 52. Priority rankings for beginning farmer success in the "Marketing" category (highest to lowest)

Rank	Item	Responses (n=63)	Mean Score
1	Assessing and selecting market options (e.g., marketing channel assessment)	57	1.28
2	Identifying a market niche	57	1.40
3	Product pricing	56	1.48
4	Marketing value-added products	57	1.49
5	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	56	1.54
6	Wholesale marketing	47	1.64
7	Cooperatives for product marketing and distribution	57	1.68
8	Internet marketing (e.g., websites and social media)	57	1.72
9	Product and business branding	55	1.78
10	Marketing for agritourism	48	1.90
11	Using export markets	48	2.27

When ranking the level of importance or priority for beginning farmer success for the "Self-employment & Labor" category, service provider respondents stated that "insurance issues and regulations" was the most important item. Below is a summary of ranking the items from the "Self-employment & Labor" category.

Table 53. Priority rankings for beginning farmer success in the "Self-employment & Labor" category (highest to lowest)

Rank	Item	Responses (n=63)	Mean Score
1	Insurance issues and regulations	53	1.45
2	Requirements and regulations associated with farm employment	53	1.53
3 (tie)	Finding and hiring the right employees	53	1.60
3 (tie)	Models for farms to pool labor and other resources	52	1.60
5	Employee management	53	1.66
6	Farm safety training for employees	53	1.68
7	Farm mentor programs	53	1.72
8	Transitioning from internship/apprenticeship programs to self-employment	53	1.77
9	Employee compensation strategies	52	1.85

When ranking the level of importance or priority for beginning farmer success for the "Business Planning & Financial Management" category, service provider respondents stated that "financial record keeping" was the most important item. Below is a summary of ranking the items from the "Business Planning & Financial Management" category.

Table 54. Priority rankings for beginning farmer success in the "Business Planning & Financial Management" category (highest to lowest)

Rank	Item	Responses (n=63)	Mean Score
1	Financial record keeping	53	1.17
2	Business planning	53	1.21
3	Managing debt	52	1.35
4	Access to affordable health insurance	52	1.37
5	Financial risk management for small farms	53	1.40
6 (tie)	Financing options	52	1.42
6 (tie)	Tax planning and preparation	53	1.42
8	Enterprise budgets	51	1.47
9	Financing grants and low interest loans	51	1.59

10	Business structure options	51	1.76
11	Small loan and peer to peer lending programs	51	1.80
12	Government loan and loan guarantee programs	51	1.82
13	Cooperative equipment sharing	50	1.84
14	Development of software tools	51	2.12

Level of Skill or Knowledge

When ranking the current level of skill or knowledge for the "Production Practices & Management" category, service provider respondents stated that "livestock processing capacity" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Production Practices & Management" category.

Table 55. Ranking of level of skill or knowledge from the "Production Practices & Management" category (lowest to highest)

Rank	Item	Responses (n=63)	Mean Score
1	Livestock processing capacity	58	2.29
2	Irrigation systems	58	2.21
3 (tie)	Food safety and Good Agricultural Practices (GAP) certification	59	2.20
3 (tie)	Tractor and equipment handling, safety, maintenance, and repair	60	2.20
5	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	60	2.18
6	Organic certification	59	2.07
7	Extending the growing season (e.g., greenhouse and high tunnel)	58	2.05
8	Animal/livestock husbandry	60	1.97
9	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	57	1.96
10	Pasture and hay land management	60	1.95
11	Conservation Best Management Practices (BMPs)	60	1.83
12	Weed, pest, & disease management	60	1.82
13	Nutrient management & soil health	60	1.80

When ranking the current level of skill or knowledge for the "Land Acquisition & Tenure" category, service provider respondents stated that "third-party farm transfers" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Land Acquisition & Tenure" category.

Table 56. Ranking of level of skill or knowledge from the "Land Acquisition & Tenure" category (lowest to highest)

Rank	Item	Responses (n=63)	Mean Score
1	Third-party farm transfers	56	2.57
2	Land-based business financing services	57	2.42
3 (tie)	Land linking services between landowners and land seekers	57	2.37
3 (tie)	Legal arrangements for land purchases and leases	57	2.37
3 (tie)	Credit for land purchase and maintenance	57	2.37
6	Intergenerational farm transfers	57	2.35
7 (tie)	Successful models and case studies for new farm purchases	57	2.28
7 (tie)	Assistance with short and long term land leases	57	2.28
9	Assistance with renting farmland	57	2.18
10	Land conservation easements	58	2.16

When ranking the current level of skill or knowledge for the "Marketing" category, service provider respondents stated that "using export markets" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Marketing" category.

Table 57. Ranking of level of skill or knowledge from the "Marketing" category (lowest to highest)

Rank	Item	Responses (n=63)	Mean Score
1	Using export markets	46	2.50
2	Product and business branding	55	2.24
3	Internet marketing (e.g., websites and social media)	55	2.18
4 (tie)	Wholesale marketing	46	2.15
4 (tie)	Cooperatives for product marketing and distribution	54	2.15
4 (tie)	Marketing for agritourism	46	2.15
7	Product pricing	53	2.11
8	Marketing value-added products	55	2.07
9	Assessing and selecting market options (e.g., marketing channel assessment)	55	2.02
10	Identifying a market niche	55	1.87
11	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	55	1.76

When ranking the current level of skill or knowledge for the "Self-employment & Labor" category, service provider respondents stated that "models for farms to pool labor and other resources" had the

lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Self-employment & Labor" category.

Table 58. Ranking of level of skill or knowledge from the "Self-employment & Labor" category (lowest to highest)

Rank	Item	Responses (n=63)	Mean Score
1	Models for farms to pool labor and other resources	49	2.59
2	Transitioning from internship/apprenticeship programs to self-employment	50	2.52
3	Insurance issues and regulations	50	2.48
4	Requirements and regulations associated with farm employment	51	2.41
5	Employee compensation strategies	50	2.38
6	Finding and hiring the right employees	51	2.37
7	Farm mentor programs	50	2.36
8	Employee management	50	2.16
9	Farm safety training for employees	51	2.06

When ranking the current level of skill or knowledge for the "Business Planning & Financial Management" category, service provider respondents stated that "small loan and peer to peer lending programs" had the lowest current level of skill or knowledge. Below is a summary of ranking the items from the "Business Planning & Financial Management" category.

Table 59. Ranking of level of skill or knowledge from the "Business Planning & Financial Management" category (lowest to highest)

Rank	Item	Responses (n=63)	Mean Score
1	Small loan and peer to peer lending programs	50	2.62
2	Access to affordable health insurance	52	2.56
3	Tax planning and preparation	51	2.51
4	Cooperative equipment sharing	50	2.40
5	Development of software tools	50	2.38
6	Financial risk management for small farms	51	2.35
7	Business structure options	52	2.29
8	Financing grants and low interest loans	52	2.27
9	Government loan and loan guarantee programs	51	2.24
10	Managing debt	52	2.04
11	Financing options	51	2.02

12	Enterprise budgets	51	1.98
13	Business planning	51	1.88
14	Financial record keeping	52	1.83

Comparison of Top Priorities with Current Level of Skill or Knowledge

Below is a table comparing the highest priority items with the current level of knowledge or skill as prioritized by service provider respondents. The five items bolded and colored light blue are the items service provider respondents classified as the highest priority items but had the least knowledge or skill. In other words, these are the five items that service provider respondents prioritized as most important but had the least knowledge of.

Table 60. Aggregated ranking of items for all five categories

Rank	Item	Priority Mean Score (highest to lowest)	Knowledge / Skill Mean Score (corresponding score)
1	Financial record keeping	1.17	1.83
2	Business planning	1.21	1.88
3	Assessing and selecting market options (e.g., marketing channel assessment)	1.28	2.02
4	Managing debt	1.35	2.04
5	Access to affordable health insurance	1.37	2.56
6 (tie)	Identifying a market niche	1.40	1.87
6 (tie)	Financial risk management for small farms	1.40	2.35
8	Successful models and case studies for new farm purchases	1.41	2.28
9 (tie)	Nutrient management & soil health	1.42	1.80
9 (tie)	Financing options	1.42	2.02
9 (tie)	Tax planning and preparation	1.42	2.51
12	Weed, pest, & disease management	1.44	1.82
13	Insurance issues and regulations	1.45	2.48
14	Legal arrangements for land purchases and leases	1.46	2.37
15	Enterprise budgets	1.47	1.98
16	Product pricing	1.48	2.11
17	Marketing value-added products	1.49	2.07
18 (tie)	Intergenerational farm transfers	1.52	2.35
18 (tie)	Assistance with renting farmland	1.52	2.18

18 (tie)	Assistance with short and long term land leases	1.52	2.28
21	Requirements and regulations associated with farm employment	1.53	2.41
22	Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	1.54	1.76
23	Tractor and equipment handling, safety, maintenance, and repair	1.58	2.20
24	Financing grants and low interest loans	1.59	2.27
25 (tie)	Animal/livestock husbandry	1.60	1.97
25 (tie)	Finding and hiring the right employees	1.60	2.37
25 (tie)	Models for farms to pool labor and other resources	1.60	2.59
28	Credit for land purchase and maintenance	1.62	2.37
29	Wholesale marketing	1.64	2.15
30 (tie)	Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	1.66	1.96
30 (tie)	Employee management	1.66	2.16
32 (tie)	Extending the growing season (e.g., greenhouse and high tunnel)	1.68	2.05
32 (tie)	Cooperatives for product marketing and distribution	1.68	2.15
32 (tie)	Farm safety training for employees	1.68	2.06
35 (tie)	Conservation Best Management Practices (BMPs)	1.69	1.83
35 (tie)	Land linking services between landowners and land seekers	1.69	2.37
37	Land-based business financing services	1.70	2.42
38 (tie)	Internet marketing (e.g., websites and social media)	1.72	2.18
38 (tie)	Farm mentor programs	1.72	2.36
40 (tie)	Pasture and hay land management	1.76	1.95
40 (tie)	Business structure options	1.76	2.29
42	Transitioning from internship/apprenticeship programs to self-employment	1.77	2.52
43	Product and business branding	1.78	2.24
44	Small loan and peer to peer lending programs	1.80	2.62
45	Government loan and loan guarantee programs	1.82	2.24
46	Food safety and Good Agricultural Practices (GAP) certification	1.83	2.20
47	Cooperative equipment sharing	1.84	2.40
48	Employee compensation strategies	1.85	2.38
49 (tie)	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	1.90	2.18

49 (tie)	Marketing for agritourism	1.90	2.15
51	Land conservation easements	1.92	2.16
52	Livestock processing capacity	1.93	2.29
53	Irrigation systems	2.00	2.21
54	Third-party farm transfers	2.05	2.57
55	Development of software tools	2.12	2.38
56	Using export markets	2.27	2.50
57	Organic certification	2.28	2.07

References

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method.* Hoboken, NJ: John Wiley & Sons, Inc.

What are the Needs of Virginia's Beginning Farmers & Ranchers?

A Survey Sponsored by the Virginia Beginning Farmer and Rancher Coalition Project

Funded by USDA, Beginning Farmer and Rancher Development Program (BFRDP)

Starting a farm is difficult, and succeeding beyond the first few years may be even more so. According to the USDA, beginning farmers and ranchers are those who have operated a farm or ranch for 10 years or less either as a sole operator or with others who have operated a farm or ranch for 10 years or less.

The goal of Virginia Beginning Farmer and Rancher Coalition Project is to improve opportunities for beginning farmers and ranchers to establish and sustain viable agricultural operations in Virginia through the development and enhancement of innovative educational programs, services, and social networks. An important step to take in reaching this goal is to identify the needs of Virginia's beginning farmers and ranchers.

Questions this survey hopes to answer: What resources should be created and made available? What kinds of educational opportunities should be developed? How should these be made available to best help farmers and ranchers begin farming and stay going? Your input is essential to getting this information right for Virginia!

Who should take this survey?

The Virginia Beginning Farmer and Rancher Coalition Project team is seeking input from beginning farmers/ranchers and the service providers who work with them across the state. We are specifically seeking input from individuals who are:

An Explorer (someone actively planning their farm entry but may not be farming as a career option yet)

Start-up Farmer (someone who is in their first few years of commercial agricultural production)

Establishing Farmer (someone who is expanding, diversifying and/or stabilizing their farming enterprise but still within the first 10 years of operation)

Transitioning Farmer (family farm members who have decision making roles on the farm without yet having primary farm operator status).

Service Providers (agricultural professionals who provide education, information, or resource support to Virginia's beginning farmers and ranchers).

What are their highest priority education, service, or resource needs?

As a beginning farmer or rancher, think about the items that appear in this survey in terms of what needs, concerns, or knowledge gaps you have identified or experienced. If you represent a beginning farmer and rancher service provider organization, think about farmer needs in terms of the support and services you or your organization provides, as well as farmer needs more broadly. Think about beginning farmers and ranchers across the full range of small to large farms; specialty crop and commodity crop operations; farms in rural areas and farms in or near urban areas.

The Survey:

The lists of items that follow were identified by beginning farmers and ranchers and the service providers who are part of the Coalition project team. Items are split into categories that fall within a whole farm planning perspective to farm startup. A whole farm planning approach views the farm as a holistic system that involves careful planning to develop strategies for successful farming. We categorized the items in five main areas that are often used in whole farm planning models:

- Production Practices and Management
- Land Acquisition and Tenure
- Marketing
- Self-employment and Labor
- Business Planning and Financial Management.

Instructions:

Your participation in this survey is entirely voluntary. You may choose not to participate or you may refuse to answer certain questions. You can choose to discontinue your participation at any time. Completion of this survey will constitute informed consent. All information collected as part of this survey will remain confidential.

Please rank each item as High (3), Medium (2), or Low (1) priority. As you read the lists you may think, "All these are high priority." Please resist the urge to simply check them all "High"; it is important that we differentiate which items tend to be more important and which tend to be less important.

Then rank your current knowledge or skill level of each item as High (3), Medium (2), or Low (1). This will help us understand what items require the most attention for programming and training purposes.

Completing the survey will take approximately 15 minutes. Our hope is that the resulting information will allow agricultural organizations, beginning farmer service providers, government agencies, and consultants to better serve your needs.

Thank you for taking the time to complete it!

Project Management Team:

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Please answer the following two questions before you begin the survey:

1.	This survey was distributed in the spring of 2011 to gather initial information for the Virginia Beginning Farmer & Rancher Coalition Project. Did you complete this survey during the spring of 2011?
0	Yes
0	No
0	I do not remember.
2.	I am a
2. •	Beginning farmer or rancher who lives in Virginia. (Includes: Explorer, Start-up Farmer, Establishing Farmer, or Transitioning Farmer) Service provider who works with beginning farmers or ranchers in Virginia. (Includes: agricultural professionals who provide education, information, or resource support to Virginia's beginning farmers and ranchers)

Section I. Priority Needs

Production Practices & Management

What is the level of importance or priority of the following items related to the education, service, information, or resource needs in the area of <u>production practices and management</u>? What is your current level of skill or knowledge of these items?

Animal/livestock husbandry COCO COCO COCO COCO COCO COCO COCO CO		Level of importance or priority for beginning farmer success			Current level of skill o knowledge			
Weed, pest, & disease management \[\begin{array}{cccccccccccccccccccccccccccccccccccc		High			_			
Nutrient management & soil health Agronomic crops (e.g., corn, soy, cotton, cereal grains) Extending the growing season (e.g., greenhouse and high tunnel) Pasture and hay land management Food safety and Good Agricultural Practices (GAP) certification Conservation Best Management Practices (BMPs) Irrigation systems COCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOCOC	Animal/livestock husbandry	\circ	0	0	\circ	0	0	
Agronomic crops (e.g., corn, soy, cotton, cereal grains) Extending the growing season (e.g., greenhouse and high tunnel) Pasture and hay land management Food safety and Good Agricultural Practices (GAP) certification Conservation Best Management Practices (BMPs) Conservation systems Conservation Systems Conservation and equipment handling, safety, maintenance, and repair Corganic certification Conservation Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, ethnic food crops)	Weed, pest, & disease management	\circ	0	\circ	\circ	0	\circ	
Extending the growing season (e.g., greenhouse and high tunnel) Pasture and hay land management Food safety and Good Agricultural Practices (GAP) certification Conservation Best Management Practices (BMPs) Irrigation systems COCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC	Nutrient management & soil health	\circ	0	\circ	\circ	0	\circ	
tunnel) Pasture and hay land management Food safety and Good Agricultural Practices (GAP) certification Conservation Best Management Practices (BMPs) Conservation Systems	Agronomic crops (e.g., corn, soy, cotton, cereal grains)	\circ	0	\circ	\circ	\circ	\circ	
Food safety and Good Agricultural Practices (GAP) certification Conservation Best Management Practices (BMPs) Conservation Systems Conservation Systems		0	0	0	0	\circ	\circ	
certification Conservation Best Management Practices (BMPs) Conservati	Pasture and hay land management	\circ	0	\circ	\circ	0	0	
Irrigation systems C C C C C C Livestock processing capacity C C C C C C Tractor and equipment handling, safety, maintenance, and repair Organic certification C C C C C C C C C C C C C C C C C C C	•	0	0	0	0	\circ	\circ	
Livestock processing capacity C C C C C C C C C C C C C C C C C C C	Conservation Best Management Practices (BMPs)	\circ	0	\circ	\circ	0	0	
Tractor and equipment handling, safety, maintenance, and repair Organic certification Org	Irrigation systems	\circ	\circ	\circ	\circ	0	\circ	
repair Organic certification Organic certifi	Livestock processing capacity	\circ	0	\circ	\circ	\circ	0	
Specialty crops (e.g., vegetables, fruit, nuts, herbs, flowers, cethnic food crops)		0	0	\circ	0	\circ	\circ	
ethnic food crops)	Organic certification	\circ	0	\circ	\circ	0	\circ	
	ethnic food crops)	0	0	0	0	0	0	

Land Acquisition and Tenure

What is the level of importance or priority of the following items related to the education, service, information, or resource needs in the area of <u>land acquisition and tenure</u>? What is your current level of skill or knowledge of these items?

	Leve	el of impo	rtance			
		r priority ginning fa	rmer		of skill dge	
	High 3	success Medium 2		High 3	Medium 2	Low 1
Successful models and case studies for new farm purchases	0	0	0	0	0	0
Land linking services between landowners and land seekers	0	\circ	\circ	\circ	0	\circ
Third-party farm transfers	0	\circ	\circ	\circ	0	\circ
Intergenerational farm transfers	\circ	\circ	\circ	\circ	\circ	\circ
Legal arrangements for land purchases and leases	\circ	\circ	\circ	\circ	\circ	\circ
Assistance with renting farmland	0	\circ	\circ	\circ	0	\circ
Assistance with short and long term land leases	0	\circ	\circ	\circ	0	\circ
Land conservation easements	0	\circ	\circ	\circ	0	\circ
Credit for land purchase and maintenance	0	\circ	\circ	\circ	0	\circ
Land-based business financing services	0	\circ	\circ	\circ	0	\circ
Other needs or comments:						

Marketing

What is the level of importance or priority of the following items related to the education, service, information, or resource needs in the area of <u>marketing</u>? What is current level of skill or knowledge of these items?

	Level of importance or priority for beginning farmer success			Current level of skill or knowledge		
	High 3	Medium 2	Low 1	High 3	Medium 2	Low 1
Assessing and selecting market options (e.g., marketing channel assessment)	\circ	0	0	0	0	0
Identifying a market niche	\circ	0	\circ	\circ	\circ	0
Product pricing	\circ	0	\circ	\circ	0	0
Direct marketing (e.g., farmer's market, road-side stand, onfarm sales, U-pick, etc.)	0	0	0	0	0	0
Wholesale marketing	\circ	0	\circ	\circ	\circ	0
Marketing value-added products	\circ	\circ	\circ	\circ	\circ	0
Cooperatives for product marketing and distribution	\circ	0	\circ	\circ	\circ	0
Internet marketing (e.g., websites and social media)	\circ	0	\circ	\circ	\circ	0
Marketing for agritourism	\circ	0	\circ	\circ	\circ	0
Product and business branding	\circ	0	\circ	\circ	\circ	0
Using export markets	\circ	0	\circ	\circ	\circ	0
Other needs or comments:						

Self-employment and Labor

What is the level of importance or priority of the following items related to the education, service, information, or resource needs in the area of <u>self-employment and labor</u>? What is your current level of skill or knowledge of these items?

	Level of importance or priority for beginning farmer success		Current level of skill or knowledge			
				High 3	Medium 2	Low 1
Requirements and regulations associated with farm employment	0	0	0	0	0	0
Employee management	\circ	0	0	0	0	\circ
Farm mentor programs	\circ	\circ	\circ	\circ	0	\circ
Farm safety training for employees	\circ	\circ	\circ	\circ	0	\circ
Employee compensation strategies	\circ	\circ	\circ	\circ	0	\circ
Transitioning from internship/apprenticeship programs to self-employment	\circ	0	0	0	0	0
Insurance issues and regulations	\circ	0	0	0	0	\circ
Finding and hiring the right employees	\circ	\circ	\circ	\circ	0	\circ
Models for farms to pool labor and other resources Other needs or comments:	0	0	0	0	0	0

Business Planning and Financial Management

What is the level of importance or priority of the following items related to the education, service, information, or resource needs in the area of <u>business planning and financial management</u>? What is your current level of skill or knowledge of these items?

Level of importance or priority for beginning farmer success			Current level of skill or knowledge		
High 3			High 3		Low 1
0	0	\circ	\circ	0	0
\circ	\circ	\circ	\circ	\circ	\circ
\circ	\circ	\circ	\circ	\circ	\circ
\circ	0	\circ	\circ	0	\circ
\circ	0	\circ	\circ	0	\circ
\circ	0	\circ	\circ	0	\circ
\circ	0	\circ	\circ	0	\circ
\circ	\circ	\circ	\circ	\circ	\circ
\circ	\circ	\circ	\circ	\circ	\circ
\circ	\circ	\circ	\circ	\circ	\circ
\circ	\circ	\circ	\circ	\circ	\circ
\circ	0	\circ	\circ	0	\circ
\circ	0	\circ	\circ	0	\circ
\circ	\circ	\circ	\circ	\circ	\circ
	prio f High 3	priority for beging farmer success High 3 Medium 2 C C C C C C C C C C C C C C C C C C C	priority for beginning farmer success High 3 Medium 2 Low 1 C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C	priority for beginning farmer success High 3 Medium 2 Low 1 High 3 C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C	priority for beginning farmer success Current level of sknowledge High 3 Medium 2 Low 1 High 3 Medium 2 C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C C

Section II. Education Program Delivery

How should educational programs and trainings be made available to <u>BEST</u> help farmers and ranchers begin farming and stay thriving? (Check all that apply)

_	
	One-day workshop
	Classroom-based short course (approximately 2-3 day course)
	Classroom-based workshop series (approximately 4 weeks over a season on a part time basis)
	Hands-on training course (approximately 4 weeks over a season on a part time basis)
	Online Classes/ Webinars
	Printed materials
	Online materials
	Farm tours
	Consulting
	Mentoring
	Internships or apprenticeships
	Other
Wo	ould online resources, self-help guides, and social networking be useful forms of
edu	cation or information for farmers and ranchers in Virginia?
0	Yes
0	No
	100
Wo	ould you personally use online resources?
***	and you personally use offine resources.
0	Yes
0	No

Section III. RESPONDENT INFORMATION /

DEMOGRAPHICS

I am a:

Beginning farmer or rancher

(Includes: Explorer, Start-up Farmer, Establishing Farmer, or Transitioning Farmer)

PLEASE SKIP TO THE NEXT SECTION. THANK YOU!

Beginning farmer and rancher service provider

(Includes: Agricultural professionals who provide education, information, or resource support to Virginia's beginning farmers and ranchers).

PLEASE SKIP TO PAGE 16. THANK YOU!

If you are a beginning farmer or rancher:

Please indicate your gender.

Male

Female

Please indicate your race.

White/Caucasian

African American

Hispanic

Asian

Native American

Pacific Islander

Other

Please indicate your age.
20-25 26-30 31-35 36-40 41-50 51-60 Over 60 Please choose the statement that most closely matches your beginning farmer or rancher status. I am a Explorer (someone actively planning their farm entry but may not be farming as a career option yet) Start-up Farmer (someone who is in their first few years of commercial agricultural production) Establishing Farmer (someone who is expanding, diversifying and/or stabilizing their farming enterprise but still within the first 10 years of operation) Transitioning Farmer (family farm members who have decision making roles on the farm without yet having primary farm operator status)
Please indicate how many years you been farming. Explorer (someone actively planning to start farming) 0-2 2-5 5-10 Over 10

Which <u>one statement</u> most accurately reflects your farming background and experience?				
0	Little or no knowledge or hands-on experience Had a farm internship, apprenticeship, or farmer mentor			
0	Learned from spouse or family member			
0	Taken some classes and/or workshops in farming or agriculture			
0	Have a degree in an agricultural related field			
0	Grew up on a farm			
0	Worked as a management level farm employee			
Ple	ase indicate how many acres you currently have in production			
	None (I am actively planning to start farming)			
0	Less than 2			
0	2-5			
0	6-10			
0	11-20			
0	21-50			
0	51-100			
0	101-200			
0	Over 200			

Ple	ase indicate the products or commodities you currently produce. (Check all that apply)
	Dairy
	Beef
	Sheep
	Swine
	Equine
	Poultry
	Other Livestock
	Fiber
	Fruit
	Vegetables
	Nursery
	Greenhouse
	Flowers
	Feed grains
	Forages, hay
	Grains, dry beans, oil seeds for human consumption
	None (I am actively planning to start farming)

Ple	ase indicate the market outlets you currently utilize. (Check all that apply)
	Commodity Markets Community Supported Agriculture (CSA) Home Delivery
	Wholesale Famers Markets Marketing Coop U-Pick Restaurants Institutional Sales (e.g., farm-to-school, farm-to-hospital, farm-to-prison) Roadside Stand Retail Store Retail Store On-farm Produce Auction Livestock Auction
	None (I am actively planning to start farming) Other addition to yourself, what types of labor do you utilize? (Check all that apply)
	None Family Interns Full-time Part-time Seasonal Migrant

Please choose the statement that most closely matches your farm location. My farm setting is best described as		
0 0 0	Urban Suburban Rural	
If y	ou are currently selling, approximately how many miles away is your primary market?	
	I sell my products at my farm. 0 to 15 Miles 16-25 Miles 26-49 Miles 50-100 Miles 101-150 Miles 151-200 Miles 200+ Miles what County is your farm located? sppropriate, please provide additional comments here:	
	ould you be willing to participate in a follow up interview or focus group to discuss the nes pertaining to beginning farmers in Virginia? Yes, please provide your email address No	

THANK YOU! PLEASE SKIP TO PAGE 19.

If you are a service provider:

Hov app	w many years of farming experience do your farmer clientele have? (Check all that ly)
	Explorer (someone actively planning to start farming) 0-2 2-5 5-10 Over 10
	nat kinds of <u>beginning farmers</u> does your organization <u>specifically</u> provide support (Check all that apply)
	Immigrant/Refugee Farmers Migrant Farm Laborers & Farmers Women Farmers Limited Resource Farmers Minority Farmers Transitioning Farmers Specialty Crop Farmers Commodity Grain Farmers Livestock Farmers Diversified Crop-Livestock Farmers
	Other (please specify)

Wh	at type of organization do you work for? Please choose one option that fits you best.
000000	Cooperative Extension Non-profit Organization Government Organization Higher Education Organization Secondary Education (e.g., high school) Other (please specify organization type)
	nat areas of knowledge, skill, or support do you provide for beginning farmers and chers? (Check all that apply)
	Production Practices and Management Land Acquisition and Tenure Marketing Options Self-employment and Labor Business Planning and Financial Management Combination of issues Other (please specify)
	nat types of activities/programs do you use in your work supporting beginning farmers? seck all that apply)
	Training/Workshops/Conferences Online Classes/Webinars Printed Materials, Videos, Informational Resource CDs Online Materials Mentorship Training Apprentice Training Farm Incubator Programming Land Link Service (Matching Landowners with Land Seekers) Consulting
	Educational Development (Curricula, Lessons, Train-the-Trainer) Other (please specify)

	Where do you provide education, training, or support service in Virginia? (Check all that apply)			
	County-based Regionally Statewide Online Other (please specify)			
issu O	ould you be willing to participate in a follow up interview or focus group to discuss the nest pertaining beginning farmers in Virginia? Yes, please provide your email address No appropriate, please provide additional comments here:			

Thank you for completing this survey!

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Please send your completed survey to Kim Niewolny.

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¹ This survey instrument was adapted from the Northeast Beginning Farmers Project survey instrument titled "Beginning Farmer Barrier ID Ranking: Ranking the needs of the beginning farmer..." Please contact Erica Frenay or Michelle (Striney) Podolec for full information: http://nebeginningfarmers.org/?page=NYBFP.