



Center for Crop Diversification Feedback Survey (AEC 2014-16) September 2014 Miranda Hileman Combs¹, Matt Ernst², Timothy A. Woods³

1. Center History

The Center for Crop Diversification (CCD) at the University of Kentucky is a virtual resource center offering printed and electronic resources on a variety of crops and marketing channels. This information is free and always electronically accessible. Small farmers across the region and the U.S. use Center resources, as do mid-sized and large producers, in decision-making and planning. Funding in 2013 from The Kentucky Agricultural Development Fund allowed expansion of the Center's Web-based marketing and production resources. These funds were used to develop online podcasts, webinars, video training, expanded price reports and new publications to meet the high demand for crop diversification information. Producers and Extension educators from surrounding states utilize many of the Center's crop and marketing profiles, interactive crop budgets, and price reports. The CCD collaborates with Extension personnel in surrounding states to offer improved educational programming, aiming to increase and improve both producer and educator resources available through the CCD during the next several years.

Specialty crops are defined by the USDA as "fruits and vegetables, tree nuts, dried fruits and horticulture and nursery crops, including floriculture." Interest in producing and marketing specialty crops is consistently supported by the USDA, and efforts to disseminate research about the past performance and future potential of specialty crops in Kentucky continue at the University of Kentucky's Center for Crop Diversification. The Center seeks to educate producers and Extension personnel who are seeking to identify profitability and farm viability options through specialty crops. Formerly known as the New Crop Opportunities Center and the Crop Diversification & Biofuel Research & Education Center (CDBREC), the Center coordinated multi-disciplinary teams of faculty, staff and students to establish research and set guidelines for producing and marketing selected crops at a profit. The Center was funded by a Special Research Grant from the USDA from July 1, 2000, to June 30, 2013.

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2. Extension Needs Related to Specialty Crops

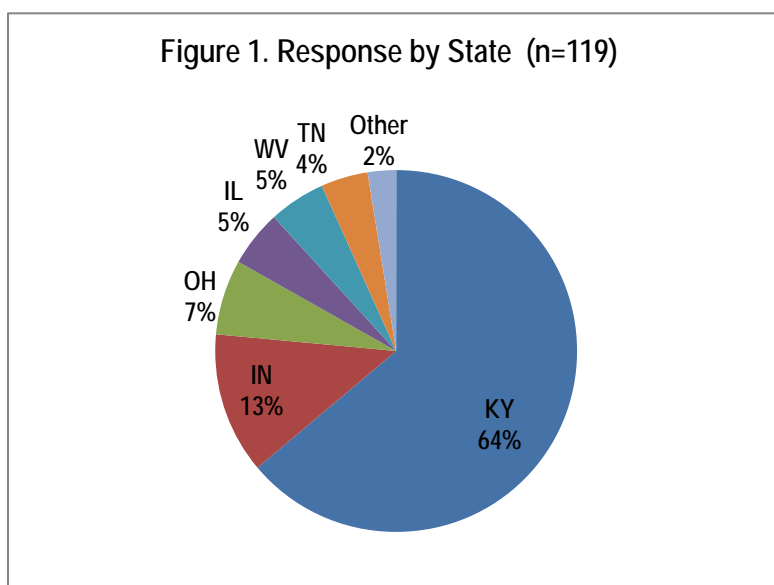
The Center launched a feedback survey in June 2014 asking respondents to evaluate the Center for Crop Diversification’s resources and website. Resources and programs from the CCD have tended toward a more regional nature, but a meaningful evaluation of the Center is needed, particularly as more formal regional collaboration is being pursued.

The survey was sent to 467 regional technical support professionals, including Agriculture and Natural Resource (ANR) and Horticulture (HORT) agents, Extension Specialists, regional university collaborators and other agencies working with specialty crops in Kentucky and specialty crop support staff in surrounding states (mainly OH, IL, IN, TN, WV). Extension and related agency staff working with producers exploring specialty crops were targeted to provide an evaluation of the CCD resources, use of the resources in local programming, and additional resources and program needs that could potentially be provided through the Center.

A total of 119 usable responses were received and are summarized here.

3. Agent Background and Affiliation

We requested survey responses from a variety of Extension personnel as well as a diverse group of agency staff working with specialty crop producers. The majority of respondents came from Kentucky (Figure 1), with county-based ANR Extension personnel most likely to respond (Tables 1 & 2). A substantial number of responses (23%) also came from regional/state Extension personnel (Table 2). Responses were most likely from staff with eight or more years at their position (Table 3). The majority of respondents (85%) communicate regularly with horticulture-based clients (Table 4).



- The majority of respondents were Extension educators in Kentucky serving specialty crop clients, but a diversity of agencies utilize the Center resources. Responses from states surrounding Kentucky indicate Extension educators in the region are already utilizing Center resources. There is a relatively high turnover and/or new support being put in place – around 1/3 of the individuals have been in their position for 4 years or less.

Table 1. Response by Institution or Agency (n=119)

Institution or Agency	Number of Respondents	% of Total Respondents
County-based Extension	80	67%
Regional or State Extension	27	23%
State Department of Agriculture	2	2%
Co-op/business development agency	4	3%
Other	6	5%

Table 2. Response by Agent or Educator (n=118)

Agent or Educator	Number of Respondents	% of Total Respondents
Agriculture and Natural Resource (ANR)	57	48%
Horticulture (HORT)	15	13%
Extension Specialist	17	14%
Extension Educator	4	3%
Extension Administration	2	2%
Local Food Systems and Small Farms Educator	5	4%
Other/Does not apply	18	15%

Table 3. Time Respondents Worked in this Position (n=118)

Length of Time	Number of Respondents	% of Total Respondents
Less than 1 year	9	8%
1 – 2 years	18	15%
3 – 4 years	12	10%
5 – 6 years	4	3%
7 – 8 years	11	9%
More than 8 years	64	54%

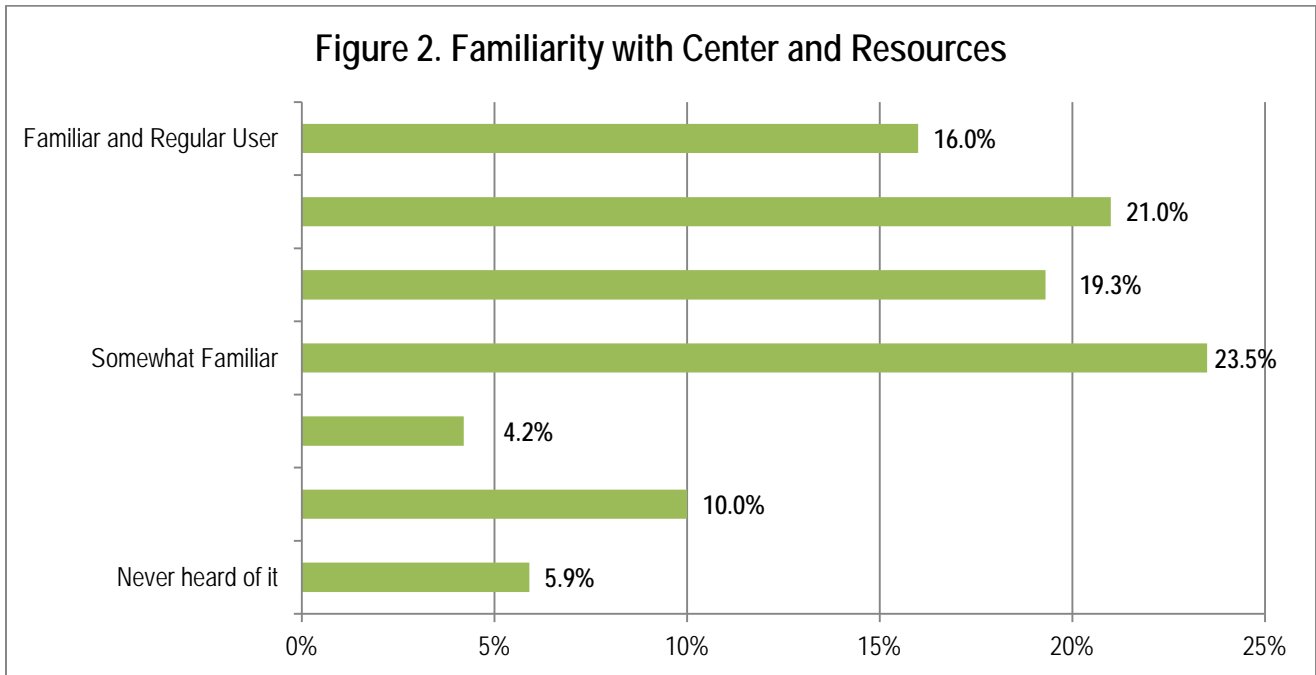
Table 4. Respondents Who Regularly Communicate with Horticulture-Based Clients (n=88)

	Number of Respondents	% of Total Respondents
No	13	15%
Yes	75	85%

4. Evaluation of Resources

On a scale rating **familiarity** with the Center for Crop Diversification and its resources, 16% of respondents noted they are a *familiar and regular user* of the website, while 64% responded that they are *somewhat familiar* with the website and Center resources (Figure 2). The other 20% of respondents who were unfamiliar with the Center for Crop Diversification and its resources were directed to the end of the survey where the questions related to future programming and resource creation.

There is clearly a need to more widely promote the Center across the region. Agents in Kentucky and contiguous states are increasingly involved in regional work (see section 6); about 1/3 of those responding were from outside the state. It's reasonable to expect there would be a much lower rate of familiarity about the Center among those that did not respond. ANR and HORT agents in Kentucky are introduced to the Center during an initial orientation, but wider and more frequent promotion is needed. ANR agents are commonly asked at least some questions related to specialty crops and should be aware of the profiles and marketing resources offered by the Center. Agents that have found their way to the Center appear to be actively utilizing the resources. The Center started an active effort to have a physical presence at the major specialty crop producer trade shows regionally in 2013-14.



N = 119

We asked respondents who were at least “somewhat familiar” with the Center for Crop Diversification and its resources (80% of total respondents) to classify their approximate utilization, quality, and usefulness of those resources. We categorized these questions by the tabs on the website; while this is a broad categorization, definite themes of website utilization and usefulness emerged.

More than 60% of website users surveyed said they accessed Crop Profiles and Crop Resources two or more times during the past 12 months (Table 5). This indicates relatively regular use of the crop-specific summaries regularly updated by Center staff. A heavy use of the economic, market and pricing resources is also apparent, as half of website users report using marketing profiles, price reports and budgets two or more times in the year previous. Price reports from produce auctions and farmers markets are among the most popular and frequently accessed pages on the website.

Resources from the site were examined by general category, according to the major tabs on the home page. Most respondents that accessed the website rated Center for Crop Diversification resources “generally as good” or “Excellent” when compared to specialty crop resources available elsewhere (Table 6). **Crop Profiles, Budgets and Price Reports** are the Center’s website categories most frequently rated as the “go-to” place for specialty crop information.

Table 5. Approximate Use of Resources Over Last 12 Months (n=90)

Website tabs	Not Used	Used Once	Used 2 – 5 Times	Used More than 5 Times	Total Respondents	Using 2 or More Times
Research	29	20	28	9	86	43%
Crop Resources	20	13	37	20	90	63%
Crop Profiles	16	13	32	26	87	67%
Decision Tools	29	27	23	7	85	35%
Budgets	27	16	27	17	87	51%
Marketing	26	19	29	13	86	49%
Price Reports	33	12	20	24	88	50%
Related Sites	41	17	15	10	83	30%
Events	49	17	10	8	84	21%

Table 6. Quality and Usefulness of Resources (n=89)

Website Tabs	Not Used – no basis for knowing	Not adequate for the need	Adequate, but better resources elsewhere	Generally as good	Excellent Resources, my “go to” place for specialty crop information	Total Respondents
Research	26	1	8	40	12	87
Crop Resources	18	0	5	47	18	88
Crop Profiles	10	0	5	40	30	85
Decision Tools	23	2	6	47	7	84
Budgets	22	1	3	40	21	86
Marketing	23	2	7	44	9	85
Price Reports	22	2	6	39	20	87
Related Sites	35	2	9	33	6	84
Events	41	2	4	32	4	83

Survey respondents generally found the Center’s website user-friendly; 30% of respondents rated it *very easy to navigate*. Only 1% responded that they *cannot find anything they are looking for* on the website. The other 69% submitted a rating somewhere between the two extremes. The average rating was a 5.86 on a 1-10 scale, with 90% of users indicating some ease in website navigation.

- Respondents indicate the Center for Crop Diversification offers resources that are both high-quality and easily accessible. Respondents indicate particular strength in the Center’s Crop Profiles, Budgets and Price Reports website sections. The website rates above average for ease of navigation, according to those surveyed.

5. Estimated Producer Impact from Center Utilization by Agents and Specialists

We asked several questions relating to website use and referrals to infer how producers become aware of the Center for Crop Diversification and its resources. Respondents estimated more than 2,000 specialty crop clients were impacted by the Center in the last 12 months, through either website referrals or materials printed from the website. This confirmed anecdotes from Kentucky Extension staff who have stated they value accessing and printing Center materials, especially crop profiles, directly from the website.

Direct impacts are estimated from completed surveys and summarized below. Estimates were obtained by multiplying the answer choice by the number of respondents who chose that answer. Estimated use by non-respondents, using a utilization rate of 25% of those responding, suggests an additional 1,500 specialty crop clients impacted by the CCD website. Supporting agents in the region that are seeking to provide direct local assistance with a variety of specialty crop production and marketing questions is a major goal of the Center. **A total annual impact of 3,500 regional agent-to-specialty crop clients appears in line**, and perhaps an underestimate, when compared against the average annual pageviews as tabulated by a Google Analytics query (Table 7). It is important to note that, as users gain familiarity with the site, site users often proceed directly to lower-level Web pages. There are certainly a large number of additional specialty crop clients going directly to the Center site. This is illustrated even in the large number of pageviews on the produce auction and farmers market price reports pages, reported in Table 7.

Table 7. CCD Website Pageviews During the Past 24 Months (Google Analytics)

Website Tabs	July 16, 2012 to July 15, 2014	Simple Annual Average
Research	726*	363*
Crop Resources	866	433
Crop Profiles	15,218	7,609
Decision Tools	1,182	591
Budgets	5,934	2,967
Marketing	2,085	1,042
Price Reports (Main Page)	2,585	1,292
Auction Price Reports	28,277	14,138
Farmers Market Price Reports	16,398	8,199
Related Sites	533	266
Events	1,281	640

* This value is only for the research tab and does not reflect greater numbers of pageviews of individual research reports accessed directly from Web searches and/or other links. Thanks to Christy Cassady for providing these data.

A majority of agency respondents refer producers to the CCD website; 51% refer “Sometimes” and 15% refer “Often” (Table 8). Respondents made an estimated 1,030 referrals to the website during the last 12 months (Table 9). We estimate usage from those agents not responding at about 25% the rate of respondents for the purposes of approximating total reach. Using this estimated rate, **1,908 referrals of specialty crop producers by agents** were made to the site over the past 12 months.

Table 8. Producer Referrals by Agents to the CCD Website (n=88)

Answer	Number of Respondents	% of Total Respondents
No	20	23%
Rarely	10	11%
Sometimes	45	51%
Often	13	15%

Table 9. Estimated Number of Producer Referrals by Agents to the CCD Website, Past 12 Months (n = 88; compressed answer choice categories)

Answer Choice	Estimated Referrals, Respondents	Estimated Referrals, Non-Respondents (at 25% rate as those agents responding)
0	0	0
1 - 20	580	441
21 - 50	280	299
51 - 100	150	157
Total Referrals	1010	898

Among the respondents, 19% *often* share hard copies with their clients and 46% *sometimes* share hard copies of Center for Crop Diversification resources (Table 10). We estimated this totaled 1,017 hard copies provided to producers by respondents and another 930 hard copies provided by non-respondents, or a **total of 1,947 hard copies shared by agents with specialty crop clients** (Table 11).

Table 10. Hard Copies of Information Provided to Producers (n = 89)

Answer	Number of Respondents	% of Total Respondents
No	17	19%
Rarely	14	16%
Sometimes	41	46%
Often	17	19%

Table 11. Estimated Number of Hard Copies Provided to Producers, Past 12 Months (n = 86; compressed categories)

Answer Choice	Estimate, Respondents	Estimate, Non-respondents
0	0	0
1 - 20	560	495
21 - 50	210	230
51 - 100	75	79
More than 100	150	126
Total	1017	930

Many of the resources developed in the CCD site are great resources for agent communications through newsletters, agency websites, and other press. Of our respondents, 58% *do not or rarely* use resources from our website as information in their own newsletters and communications. Only 2% of respondents used CCD resources 10 times for newsletters or communications with clients in the last 12 months. We estimated CCD resources used in the respondents' own newsletters/communications a total of 217 times in the past 12 months, with an additional 226 uses by non-respondents for **443 total uses of CCD resources in agent newsletter/communication to specialty crop clients**.

Table 12. Respondents who Use Resources from Website for Own Newsletters/Communications (n = 88)

Answer Choice	Number of Respondents	% of Total Respondents
No	32	36%
Rarely	19	22%
Sometimes	34	39%
Often	3	3%

Table 13. Estimated Total Times Resources Used In Clientele Communications, Past 12 Months (n = 83)

Answer Choice	Estimate, Respondents	Estimate, Non-respondents
0	24	112
1	17	19
2	30	34
3	15	17
4	16	18
5	45	51
6	18	20
7	7	16
8	16	18
9	9	10
10	20	23
More than 10	0	0
Total	217	226

- Extension educator use and referrals likely account for approximately 50% of website usage, based on total crop profile pageviews reported over the past 12 months. Website and hard copy resources are most popular among those surveyed. Website resources for clientele communication are being lightly used by respondents.

6. Trends in Extension Programming

We asked respondents several questions about future programs and resources we could or should offer. Approximately 83% of our respondents shared their thoughts and suggestions, which we plan to incorporate into near-term Center programming.

The top in-service topics respondents would like to see from the Center for Crop Diversification are:

- Enterprise Budgets
- Food Safety/GAP
- Marketing with Social Media/Technology
- Food Hubs/Worker-Owned Cooperatives
- Organic Production
- Business Planning/Train the Trainer

Production and marketing training for producers, as well as additional crop profiles, were most frequently listed as future programming desired by respondents (Table 14). Respondents were almost evenly split on their desire for videos and webinars, with at least one respondent noting bandwidth speed is an issue.

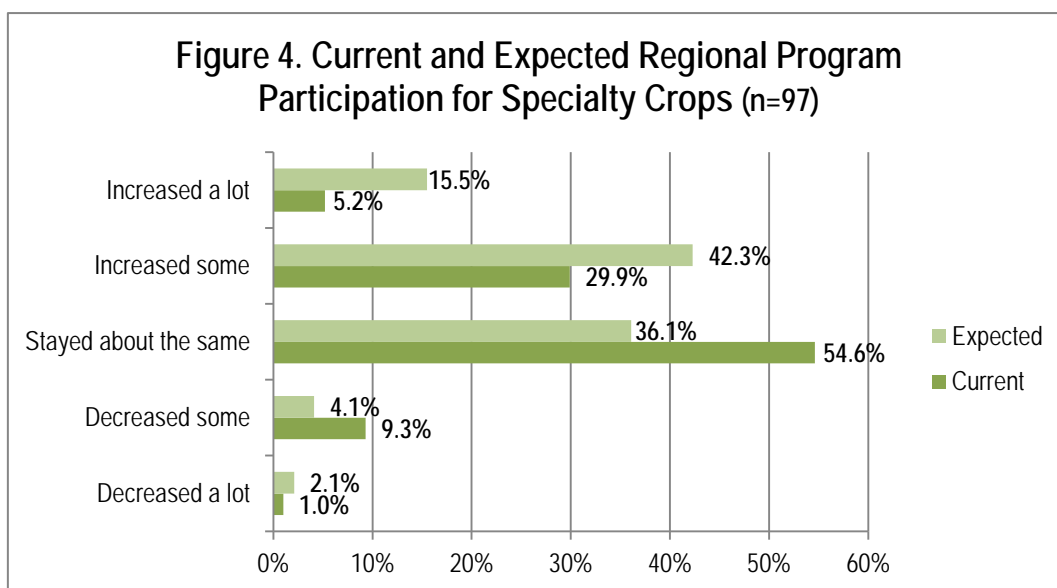
Table 14. Types of Future Programming Desired by Respondents

Type of Programming	% Respondents
Videos	47%
Webinars	47%
Podcasts	14%
Production Training for Producers	61%
Management Training for Producers	38%
Marketing Training for Producers	55%
Decision-making tools	46%
New Crop Profiles	57%
New Marketing Profiles	41%

N = 99

Respondents were encouraged to offer additional comments on this question. Selected responses included:

- “I think hands-on production training for producers has the potential to be particularly effective. Our capabilities for this type of training at the South Farm have been enhanced with new facilities and a new farm manager.”
- “Resources for the beginning farmer...especially...what do I do with my 5 acres? These folks have special and diverse needs.”
- “We need entrepreneurial training on how to run a profitable business, different types of business structures, and we need training on setting up and running food hubs, cooperative groceries, etc.”
- “Organic weed control and possibly Radio mp3 files that could be added to programming efforts.”
- “Our clients often need a lot of hand holding in all aspects of their businesses, but don’t necessarily have time for webinars. They often need access to info that isn’t available and more detailed/specific from USDA websites – the center excels in this.”
- “Limited internet bandwidth makes anything other than text very slow.”



Agents working with specialty crops are increasingly becoming involved in regional programs to help with training and professional development. This regional approach is becoming more important, suggesting an increasing role for regional resources like the CCD. Regional programming has *stayed about the same* or *increased* for 91% of the survey respondents during the past 3 – 5 years (Figure 4). More than half (57.8%) expect an increase in their regional program participation for specialty crops during the next 3 – 5 years.

Two-thirds of respondents indicated heavy use of the CCD newsletter (Table 15). One-fourth indicated they had stopped by a CCD booth at an event in the past 12 months, while slightly more than one-third have “liked” the Center Facebook page. Social media use was explored in consideration of alternative technology platforms for the Center. Facebook, Google and LinkedIn were the most popular social media tools used by respondents, who indicated relatively light usage of Twitter and Pinterest and rare usage of Instagram and Flickr.

Table 15. Respondent Interactions with CCD Programming in Past 12 Months

	Stopped by a CCD Booth (N = 107)	Receive Monthly Newsletter (N = 98)	“Like” Facebook Page (N = 90)
No	70%	32%	63%
Yes	24%	68%	37%
Can't Recall	6%	n/a	n/a

Table 16. Social Media Tools that Respondents Use

Tool	Rarely/None	Sometimes	Often	Total respondents
Google	44.1%	14.0%	41.9%	95
Pinterest	74.7%	13.7%	11.6%	95
Instagram	83.7%	7.6%	8.7%	92
Twitter	71.6%	21.1%	7.4%	95
Blog	71.6%	21.6%	8.0%	91
LinkedIn	63.2%	30.5%	6.3%	93
Flickr	90.1%	7.7%	4.4%	88

- Online CCD resources – especially crop profiles – and future educational programs for trainers and producers are viewed as most useful by survey respondents, who expect regional programming will increase.

7. Selected Comments from Respondents and Regional Educators

Respondents from Kentucky and surrounding states express continued demand for online specialty crop resources – like crop profiles, budgets and price reports. Additional comments shown here, from agents and Extension educators in the region, also express this demand.

“The center provides quick access to crop information, decision tools, price reports and marketing information that is hard to find elsewhere, especially in a form that is relevant to the Midwest. The CCD is one of my top three websites where I seek such information.”

- Roy Ballard, Purdue University, Hancock County Extension Educator

“The Center for Crop Diversification’s website contains all the resources that I need when clients come to me with questions about new and different crop choices for their farms. It is immensely helpful as a starting point for making production and management decisions.”

- Beth Wilson, University of Kentucky, Pulaski County Extension Agent for Horticulture

"As an agent, I rely on the Center for Crop Diversification website every time I get a question from clientele about a crop or process that I'm unfamiliar with. Farmers and landowners are looking for niche markets or seeking the next great money making crop while homeowners will want to experiment with something like hops for instance. There's no way I can be familiar with all of the possible scenarios out there so I send them the Center for Crop Diversification link or mail them the publication. Armed with that profile we decide if they want to pursue it further and if so, there's plenty of links provided. With all the resources it's almost a one-stop-shop."

- Keenan Bishop, University of Kentucky, Franklin County Extension Agent for ANR

"As a commercial Horticulture Specialist and Agriculture Extension Educator I work with small acreage farmers that need to generate high value returns from their limited small acreage Appalachian farms. The Center for Crop Diversification has the best all around "package" of educational materials and resources providing me one stop shopping to get the necessary research based educational materials needed to teach and train my farmer clientele looking to diversify into high value specialty crops."

- Brad Bergefurd, Ohio State University, Commercial Horticulture Extension Specialist

"CCD resources are a useful tool for my clients in Illinois; especially those getting started in farming."

- Deborah Cavanaugh-Grant, University of Illinois Extension, Local Food Systems and Small Farms Educator

"I have found both University of Kentucky personnel and the UK CCD website to provide timely, useful, easy to understand information on a wide variety of topics of interest to specialty growers I work with. Most recently, our team began a pilot Illinois Farmers Market Price Reporting project with CCD at six farmers markets throughout Illinois."

- Steve Ayers, University of Illinois Extension, Local Food Systems Small Farms Educator

"The UK Center for Crop Diversification provides crop information, decision tools and marketing information that is helpful to many of the farmers that we work with; especially those considering a new crop enterprise. The website provides quick access to information that is useful and relevant; we utilize the information for many of the projects we analyze and we often refer clients and Extension Agents directly to it."

- Rob Holland, Director, Center for Profitable Agriculture (University of Tennessee Extension)

7. Implications for Future Center for Crop Diversification Programming

The survey indicates the Center for Crop Diversification website is fulfilling a key need for providing specialty crop educational materials and enterprise analysis to Extension and agency educators in Kentucky and surrounding states. The website is also being seen as a regional resource directory for specialty crop marketing with the expansion of produce auction and farmers market price reports. The Center's resources are viewed as being accessible to both established farmers and less-traditional but emerging clientele like the acreage owner.

Based on survey responses, future plans for the Center for Crop Diversification can include:

- Promoting the Center and all of our specialty crop resources more effectively
- Educating Extension agents, educators and producers about how to use our website and resources
- Providing trainings on specialty crop production, marketing, management, high tunnel production, and organic production for Extension agents and producers
- Working with regional partners to develop resources and information relevant to our entire region
- Making recent and very important information more easily accessible on the website
- Creating more detailed crop production information to be used as a "Part 2" to our current crop profiles

- Creating understandable and easily accessible decision-making tools for producers to narrow down specialty crop options specific to their situation
- Updating enterprise budgets more regularly, generating new budgets, and creating opportunities to teach users how to use the budgets several times a year
- Sharing video case studies of successful specialty crop producers and marketers who are willing to share lessons learned through their journey
- Creating a partnership with the Kentucky Department of Agriculture to design a comprehensive GAP and Food Safety Training Program for Kentucky producers
- Making newsletter articles and “press releases” about new specialty crop information more accessible to agents for their own monthly newsletters
- Sharing monthly crop updates from UK research farms for agents to use in their monthly newsletters
- Sharing innovative and technology-oriented marketing tools and strategies for Extension agents to teach their producers
- Partnering with regional organizations to spread the word about our resources
- Creating and widely disseminating information about starting food hubs, worker-owned cooperatives, etc.
- Possibly adding business planning resources to our website in partnership with the Kentucky Small Business Development Center and/or the Kentucky Center for Agricultural and Rural Development



The Center for Crop Diversification is supported by a grant from the Kentucky Agricultural Development Fund.

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