

CONSERVATION PRACTITIONER POLL 2021 SUMMARY REPORT





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Responses to the Conservation Practitioner Poll were anonymous, and photos included do not indicate those individuals’ participation in the poll.

Introduction

Conservation practitioners are the delivery system for natural resource conservation across the nation. Employees of the USDA Natural Resources Conservation Service (NRCS), Soil and Water Conservation Districts and Departments (SWCDs), state conservation agencies, and nongovernmental conservation organizations work directly with farmers and landowners to implement conservation practices through technical assistance, conservation planning, and program implementation. Recent research has found that interaction with a conservation professional over time is a consistent predictor of farmer adoption of conservation practices.¹ Despite the critical role that conservation practitioners play in helping farmers protect the nation's natural resources, the voice of conservation practitioners is largely absent from policy discussions. Without a direct feedback mechanism from conservation practitioners, policy makers are at a disadvantage as they develop policies and programs that guide conservation implementation across the nation.



To address this lack of direct feedback and elevate the perspectives of conservation practitioners, the Soil and Water Conservation Society (SWCS) has created the Conservation Practitioner Poll (CPP), a survey designed to regularly collect data on the needs and recommendations of conservation practitioners on a wide variety of topics. The inaugural survey was conducted in spring 2021 with funding from the Walton Family Foundation and in partnership with Iowa State University (ISU) researchers Dr. J. Arbuckle, professor of rural sociology, Extension sociologist, and director of the Iowa Farm and Rural Life Poll, and Chris Morris, PhD student in rural sociology and sustainable agriculture and former 15-year conservationist with the USDA NRCS.

Conservation practitioners were actively involved in the design of the CPP survey as focus group participants and survey draft reviewers, and their insights informed survey topics and priorities. The inaugural poll was distributed to conservation practitioners in six Upper Mississippi River Basin states: Illinois, Indiana, Iowa, Minnesota, Missouri, and Wisconsin. Conservation practitioners from the NRCS, county SWCDs, state conservation agencies, watershed coordinators employed by various entities, and Pheasants Forever were invited to participate.

The goals of the inaugural CPP are threefold: to learn from boots-on-the-ground practitioners how to improve the conservation delivery system, to understand what conservation practitioners need to be satisfied and successful in their jobs, and to elevate their voice in national conversations. The information gathered from this poll provides insight into conservation practitioners' perspectives regarding conservation programs and policies. Given that research has shown that farmers who interact regularly with conservation practitioners are more likely to adopt conservation practices, this poll also seeks to understand how best to support them in their work. Farmers and landowners, communities, the American taxpayer, and our natural resources will all benefit from practitioners who feel their voice is valued and that the conservation system can adapt to their needs and recommendations.

1. Morris, C., and J.G. Arbuckle. 2021. Conservation plans and soil and water conservation practice use: Evidence from Iowa. *Journal of Soil and Water Conservation*. <https://doi.org/10.2489/jswc.2021.00166>.

Methods

Survey development was guided by focus groups with conservation professionals conducted between November 2020 and March 2021. The SWCS leadership provided the ISU researchers with a list of SWCS members who have been actively engaged in the organization from each of the six targeted states in our study. To maintain confidentiality, ISU researchers then recruited a subset of conservation practitioners from that list. Potential participants were divided into four categories according to job title: watershed coordinators, SWCD employees, NRCS District Conservationists, and NRCS Soil Conservationists. In some cases, to ensure that the focus groups included professionals from each group and each state, the SWCS lists were augmented with other potential participants who were selected from online organizational contact lists. Each potential participant was sent an email requesting their participation in a focus group, and a letter from SWCS leadership was attached explaining that the purpose of the focus groups was to guide development of the CPP.

A focus group protocol was developed to guide the focus group discussions. Participants were asked a series of questions about various aspects of their jobs, including work with conservation programs, forms of outreach, when they felt most effective, and when they felt the most frustrated. Since a major objective of the focus groups was to elicit participants' perspectives on the types of issues that the CPP should examine, the discussions emphasized participants' help in identifying important areas of inquiry.

The focus groups were conducted with 3 to 5 conservation practitioners from each of the four job title categories. In total, 16 practitioners from across the six targeted states participated in the focus groups. Focus groups were conducted via Zoom and averaged around one and a half hours each. Discussion and feedback from these focus groups informed the development of the survey instrument. Several of the conservation practitioners who participated in the focus groups also reviewed the survey instrument and provided comments and suggested edits and additions.

The survey sample frame was developed by Catherine DeLong, former SWCS special projects and policy director. She obtained the names, job titles, and emails of all employees of the agencies and organizations of interest by either contacting state organization leaders for the information directly or by obtaining the information from online employee directories. The survey was targeted to only those conservation professionals who provide technical assistance directly to farmers on a day-to-day basis. For that reason, NRCS survey participants were limited to Soil Conservationists and Soil Conservation Technicians, and Pheasants Forever participants were limited to Farm Bill biologists. At the district, department, and state-level organizations, DeLong worked with various contacts to refine organization staff listings to those who offer technical assistance to farmers. The final sample of 1,715 conservation practitioners from the six states consisted of 887 NRCS employees, 613 SWCD employees, 89 state conservation agency employees, 76 watershed coordinators who worked with various agencies and organizations, and 50 Pheasants Forever Farm Bill biologists.

A web-based survey was constructed using Qualtrics, and a link to the online survey was first emailed to all potential participants on May 26, 2021. The email included a message from Clare Lindahl, CEO of SWCS, emphasizing that this "first of its kind" survey had been developed "for conservation practitioners by conservation practitioners" to "gain the perspective of conservation practitioners" and "elevate their voices." A first reminder email was sent to respondents on June 2, and a second reminder email was sent on June 10. A final reminder email was sent on June 14, and the survey was closed on June 15. Three of the potential respondents were no longer in their positions and were thus ineligible. Out of the 1,712 eligible conservation practitioners who were emailed the survey, 415 filled out the survey for a response rate of 24%. The survey results were completely anonymous.

Results

This section presents the tabulated survey results. To add nuanced context to the findings we also include relevant quotes from the focus groups and from an open-ended survey question that invited respondents to share additional comments.

EFFECTIVENESS OF METHODS FOR ESTABLISHING CONTACTS AND RELATIONSHIPS

The focus group participants centered a substantial amount of discussion on the relative effectiveness of different ways that their organizations use to initiate and establish relationships with farmers and landowners. The survey included a question set asking respondents to rate the effectiveness of various strategies on a five-point scale from “not at all effective” to “highly effective” (table 1). Introductions from trusted sources topped the list, with respondents rating “Introductions from trusted farmers” as the most effective approach, with 82% rating it either effective or highly effective. “Introductions from trusted conservation practitioners” and “Attending meetings (e.g., field days) that farmers and landowners attend” were rated as the second and third most effective approaches (70% and 69%, respectively), and 59% rated “Targeting opinion leader farmers” as effective. Interestingly, just under half of respondents (47%) rated “Relying on walk-in customers,” commonly referred to as the “shotgun approach” to conservation, as effective. Forty-four percent of respondents rated “Recruiting farmers/landowners at community gathering spots (e.g., coffee shops, restaurants)” as effective, and 40% rated “Recruiting farmers/landowners at agricultural retailers (e.g., co-ops)” as effective. However, 26% and 30% of respondents, respectively, chose “don’t know” regarding the effectiveness of these items. This potentially suggests that these outreach methods, which have been described as traditionally common, have not been used by a substantial percentage of current conservation practitioners.



“So we partner and find ways to connect with a partner that we know that farmers trust. We’re a small enough area that I’ll target a specific farmer, due to their influence or land size. And so I find out what they’re involved in, and then partner with those entities in order to target that specific person.”

Three items were rated as effective or highly effective by fewer than 20% of respondents, with “Billboards” (12%), “Targeted Facebook ads” (14%), and “Offering swag (e.g., branded notebook, rain gauge, etc.)” (20%) being the least effective outreach methods. Targeted Facebook ads and billboards also had the highest percentages of “don’t know” answers (39% and 52% respectively), potentially indicating that these outreach methods are not commonly used. Only 28% of respondents rated “Mass mailings to farmers/landowners,” which tends to be a common form of outreach, as effective.

TABLE 1

Effectiveness of methods for establishing relationships with farmers and landowners.

Method	Don't Know (%)	Not at All Effective (%)	Somewhat Effective (%)	Effective (%)	Highly Effective (%)
Introductions from trusted farmers	7	1	11	40	42
Introductions by trusted conservation practitioners	10	2	19	43	27
Attending meetings (e.g., field days) that farmers and landowners attend	8	1	23	42	27
Targeting opinion leader farmers	18	2	22	39	20
Offering incentives (e.g., soil testing kit)	19	4	26	35	16
Relying on walk-in customers	2	12	38	36	11
Endorsements from agricultural retailers or co-ops	25	2	28	33	12
Recruiting farmers/landowners at community gathering spots (e.g., coffee shops, restaurants)	26	4	26	27	17
Recruiting farmers/landowners at agricultural retailers (e.g., co-ops)	30	4	26	29	11
Newsletters	7	4	51	33	5
Cold-contacting landowners who own critical source areas	18	9	37	27	9
Cold-contacting farmers who farm critical source areas	19	9	37	25	9
Cold-calling farmers/landowners	14	17	38	24	7
Mass mailings to farmers/landowners	7	8	56	23	5
Offering swag (e.g., branded notebook, rain gauge, etc.)	27	19	35	14	5
Targeted Facebook ads	39	16	30	11	3
Billboards	52	13	24	10	2

"...it seems really key to get a farmer excited about it who's well connected. That seems to be if you get the right person in place, then boom, the word spreads and things happen."



EFFECTIVENESS OF IMPLEMENTATION STRATEGIES

Survey participants were also asked to rate the effectiveness of different approaches that conservation practitioners use to work with farmers to get conservation on the ground. This question set also used a four-point effectiveness scale ranging from “not at all effective” to “highly effective.” Nearly all conservation practitioners (99%) rated “Building long-term relationships with farmers/landowners through multiple interactions over time” as either effective or highly effective, followed by “Working face-to-face with farmers/landowners in the field” (97%) (table 2). Ninety-two percent of participants rated “Cost share programs” as effective, and 86% rated “Working face-to-face with farmers/landowners in your office” as effective. Seventy-seven percent rated “In-person field days and workshops” as effective. On the lower end of the spectrum, 29% of participants rated “Processing conservation compliance requests (i.e., HEL, wetlands determinations)” as effective.

TABLE 2

Effectiveness of approaches to working with farmers and landowners to establish conservation practices.

Approach	Don't Know (%)	Not at All Effective (%)	Somewhat Effective (%)	Effective (%)	Highly Effective (%)
Building long-term relationships with farmers/ landowners through multiple interactions over time	1	0	0	13	86
Working face-to-face with farmers/landowners in the field	1	0	2	20	78
Cost share programs	1	0	7	34	58
Working face-to-face with farmers/landowners in your office	1	1	12	49	37
In-person field days and workshops	3	1	20	47	29
Working with farmers/landowners on conservation plans	3	2	21	50	25
Working with farmers/landowners on program application paperwork	4	5	26	47	20
Providing technical assistance to farmers/ landowners via phone	2	2	37	49	11
Providing technical assistance to farmers/ landowners via email	4	6	47	36	7
Processing conservation compliance requests (i.e., HEL, wetlands determinations)	20	14	37	24	5
Virtual field days, workshops, webinars, etc.	17	13	47	19	4
Providing technical assistance to farmers/landowners via web conferencing (e.g., Zoom, Webex)	39	14	34	11	2

“...one-on-one with farmers, I would say, always ends up being the most effective. And small conversations end up leading to their adoption of practices and then their neighbors and then their sons.”

Because virtual platforms have become a major method of interacting with clients during the Covid-19 pandemic, the survey had two virtual meeting items. The methods, “Providing technical assistance to farmers/landowners via web conferencing (e.g., Zoom, Webex)” and “Virtual field days, workshops, webinars, etc.,” were rated the least effective methods of working with farmers, with just 13% and 23%, respectively, selecting “effective” or “very effective.” That said, the web conferencing item had a high “don’t know” response (39%) so this method may not be widely used.

“And through the years you help them improve their farm and the way they do things, and you actually develop a good relationship with them.”

EASE OF PROGRAM ADMINISTRATION

Focus group discussions about working with different types of programs suggested that some programs are easier than others to administer. To gauge the perspectives of the broader conservation practitioner community, the survey asked respondents to rate the ease of administration of various conservation programs on a five-point scale from “very difficult” to “very easy,” with a “don’t know” option (table 3). State-level cost-share programs ranked highest in terms of ease of administration with the majority of respondents, 52%, selecting either “easy” or “very easy,” and only 8% selecting “difficult” or “very difficult.” Conservation Technical Assistance ranked second at 47% easy or very easy and 9% difficult or very difficult. In regards to the Conservation Reserve Program and the Environmental Quality Incentives Programs, participants were decidedly mixed in their ratings of ease of administration. For the Conservation Reserve Program, 25% found it easy or very easy to administer, and 32% found it difficult or very difficult. For the Environmental Quality Incentives Program, 20% found it easy or very easy to administer and 44% selected difficult or very difficult. The program the most participants rated as difficult

“I would say CSP is the most complex. It’s the hardest to explain to the producers. It takes the most time to deliver...”

to administer was the Conservation Stewardship Program, with 62% of respondents rating it difficult or very difficult, and only 4% rating it easy or very easy. This is a significant finding in that the Conservation Stewardship Program is the largest conservation program in the United States.

Several programs listed in the survey were unfamiliar to most participants. Seventy-three percent reported not knowing enough to rate the ease of administration of privately funded programs (e.g., the Coca Cola cover crop program). Majorities also selected “don’t know” for state-level conservation certification programs (e.g., Michigan Agriculture Environmental Assurance Program, Minnesota Agricultural Water Quality Certification Program) (65%) and the Agricultural Conservation Easement Program (52%). Because the reported levels of “don’t know” were relatively high for a number of programs, the



TABLE 3

Conservation program ease of administration.

Program	Don't Know (%)	Very Difficult (%)	Difficult (%)	Neither Difficult nor Easy (%)	Easy (%)	Very Easy (%)
State-level conservation programs (e.g., cost-share)	14	1	7	27	39	13
Conservation Technical Assistance (CTA)	21	1	8	23	29	19
Conservation Reserve Program (CRP)	16	6	26	28	19	6
Environmental Quality Incentives Program (EQIP)	14	6	38	22	16	4
Targeted watershed programs (e.g., EPA 319 grants, state-level priority watershed programs)	42	3	17	21	12	4
State-level conservation certification programs (e.g., Michigan Agriculture Environmental Assurance Program, Minnesota Agricultural Water Quality Certification Program)	65	0	6	16	10	3
Regional Conservation Partnership Program (RCPP)	42	6	24	18	9	1
Privately funded programs (e.g., Coca Cola cover crop program)	73	0	5	13	6	3
Conservation Stewardship Program (CSP)	19	31	31	15	3	1
Agricultural Conservation Easement Program (ACEP)	52	13	21	12	2	0

percentages of participants that did have an opinion on program ease of administration were recalculated with the “don’t know” answers excluded. Controlling for uncertainty did result in a few substantial shifts. The proportion of conservation practitioners rating privately funded programs as easy to administer increased from 9% to 34% of participants, and ease ratings of state certification programs increased from 13% to 36% easy or very easy. The percentage of conservation practitioners rating CTA as easy to work with increased from 47% to 59%, and ratings of targeted watershed programs increased from 17% to 29% of participants rating them as easy. While this did not change the ranking considerably—state programs and CTA remained the top two programs for ease of administration and CSP remained the lowest—examination of ratings only from conservation practitioners who were familiar with the programs did move state certification programs and privately funded programs to the third and fourth rankings, respectively, in terms of ease of administration.

“Typically, the state programs are easier and more flexible, there’s less paperwork involved, there’s less things they have to sign if they cancel. That’s not as big of a problem.”

PROGRAM AND WORKPLACE EFFECTIVENESS

The CPP included questions regarding different issues related to program and workplace effectiveness that had been identified through the focus groups. Participants were provided with several statements related to the workplace, programs, and interactions with farmers and were asked to indicate their level of agreement on a five-point scale from “strongly disagree” to “strongly agree” (table 4). The items are loosely ordered into three categories: organizational procedures, prioritization of assistance, and outreach-oriented. Among the procedures items, the statement that

had the highest level of agreement was “It’s frustrating when program rules and procedures change from year to year,” with 91% of participants agreeing. There was also a high level of agreement with the statements “High employee turnover among conservation practitioners negatively impacts conservation momentum” (90%), “The amount of paperwork and procedures associated with contracts is excessive” (84%), and “The amount of paperwork and procedures that farmers/landowners have to do discourages participation in programs” (84%). Other items that more than three-quarters of conservation practitioners agreed or strongly agreed with were “Communication between organizations (e.g., NRCS, SWCD, watershed coordinators) about program rules, procedures, etc. should be improved” (81%), “Paperwork and procedures get in the way of face-to-face work with farmers/landowners (80%), and “The required interaction of various programs, funders, schedules, and standards can be too complex” (77%). The last item in this category, “Multiple funding sources (federal, state, local) work together well to implement soil and water conservation practices,” received 62% agreement.

“...the biggest hindrance in getting conservation on the land is the amount of time spent in the office doing program applications. This greatly reduces the amount of time available to have in person on-farm visits, which is where conservation REALLY happens.”

The results for the items focused on prioritization of conservation assistance were more mixed. Two items that focused on proactive targeting of conservation assistance received the highest levels of agreement in the section, with “Conservation needs should be evaluated at the watershed/landscape level to identify the most important sources of nutrient loss or other problems,” and “Targeted conservation is a good idea because limited resources should be spent where they have the most impact” receiving 78% and 72% agreement, respectively (table 4). The lowest level of agreement was for the statement, “Conservation tends to be planned and applied to address the greatest local environmental concerns,” with 40% agreeing with this statement and 29% disagreeing. This statement also had the highest proportion of participants reporting uncertainty, at 31%. Participants were fairly equally divided regarding the statement, “Financial assistance for conservation tends to be distributed on a first-come, first-served basis,” with 47% agreeing with the statement and 38% disagreeing.

Of the outreach-oriented items, two related statements, “Conservation organizations should facilitate more face-to-face time with farmers and landowners” and “Lack of field staff reduces my office’s capacity to get conservation on the ground” received the highest endorsement, with 90% and 78% of conservation practitioners agreeing or strongly agreeing, respectively (table 4). A statement about public-private partnerships, “Soil and water conservation agencies should develop stronger partnerships with agricultural retailers,” also received high level of agreement, at 69%. A final item, “More effort should be put into outreach to nonoperator landowners,” received agreement from nearly two-thirds of respondents.

“...with the staffing, all of the turnover that there’s been...that’s a barrier to being able to keep up your progress and your momentum and move forward.”

TABLE 4

Agreement with statements related to the workplace, programs, and interactions with farmers.

Statement	Strongly Disagree (%)	Disagree (%)	Uncertain (%)	Agree (%)	Strongly Agree (%)
Organizational procedures					
It's frustrating when program rules and procedures change from year to year	0	2	7	37	54
High employee turnover among conservation practitioners negatively impacts conservation momentum	0	3	7	47	44
The amount of paperwork and procedures associated with contracts is excessive	1	6	10	37	47
The amount of paperwork and procedures that farmers/ landowners have to do discourages participation in programs	1	6	10	40	44
Communication between organizations (e.g., NRCS, SWCD, watershed coordinators) about program rules, procedures, etc. should be improved	1	6	13	50	31
Paperwork and procedures get in the way of face-to-face work with farmers/landowners	1	9	11	37	43
The required interaction of various programs, funders, schedules, and standards can be too complex	1	7	15	51	26
Multiple funding sources (federal, state, local) work together well to implement soil and water conservation practices	4	20	14	48	14
Prioritization of assistance					
Conservation needs should be evaluated at the watershed/landscape level to identify the most important sources of nutrient loss or other problems	1	4	17	48	30
Targeted conservation is a good idea because limited resources should be spent where they have the most impact	1	8	20	49	23
Technical assistance for conservation tends to be distributed on a first-come, first-served basis	3	22	11	52	13
Financial assistance for conservation tends to be distributed on a first-come, first-served basis	7	31	15	36	11
Conservation tends to be planned and applied to address the greatest local environmental concerns	3	26	31	36	4

TABLE 4 CONTINUED

Agreement with statements related to the workplace, programs, and interactions with farmers.

Statement	Strongly Disagree (%)	Disagree (%)	Uncertain (%)	Agree (%)	Strongly Agree (%)
<i>Outreach-oriented</i>					
Conservation organizations should facilitate more face-to-face time with farmers and landowners	0	1	9	58	32
Lack of field staff reduces my office's capacity to get conservation on the ground	1	8	14	36	42
Soil and water conservation agencies should develop stronger partnerships with agricultural retailers	1	5	26	52	17
More effort should be put into outreach to nonoperator landowners	1	5	29	47	18

"I guess one of the frustrations would be just the timeline of when we learned about things so that we have time to feel comfortable with what has changed or what the requirements are going to be. Well in advance of when all that stuff is going to have to be done..."

IDEAS FOR IMPROVING PROGRAMS

Focus group discussions also centered on ideas for improving the ease of administration and effectiveness of conservation programs. To address this topic, survey respondents were asked to rate a series of potential changes on a four-point scale from "not at all helpful" to "very helpful." The statements are organized into two categories, items related to streamlining programs to benefit conservation practitioners, and customer-oriented items focused on improving farmer and landowner experiences.

Among the conservation practitioner-focused statements, several were rated as helpful or very helpful by nearly all respondents. Ninety-five percent of participants indicated

that "Being trained on any new program rules and policies well before the program application window" would be helpful or very helpful, and 94% indicated that "Program rules and policies being more consistent from year to year" would be helpful or very helpful (table 5). Ninety-four percent of participants reported that "Better communication between agencies/partners regarding program rules and policies" would be helpful, 90% reported that "More user-friendly planning and contracting software" would be helpful, and 89% reported that "More uniformity in rules from program to program" would be helpful. Helpfulness ratings were lowest for the statement "Consolidating the number of programs," but still 63% indicated that this change would be either helpful or very helpful.

Of the statements related to customer experience, two of the highest-rated items focused on timing. The statements "Greater flexibility with regard to the timing and location of practices," "Less complicated practice implementation documentation for producers," and "Shorter turnaround time between application and funding" were rated as helpful or very helpful by 83%, 81%, and 70% of respondents, respectively. Majorities (55%) indicated that "Funding allocated more towards establishing new practices rather than maintaining or enhancing existing practices" and having "Several application deadlines throughout the year rather than just once a year" would be helpful or very helpful.

TABLE 5

Potential changes to improve ease of administration and effectiveness of conservation programs.

Change	Not at All Helpful (%)	Slightly Helpful (%)	Helpful (%)	Very Helpful (%)
Conservation practitioner-focused streamlining				
Being trained on any new program rules and policies well before the program application window	1	5	27	68
Program rules and policies being more consistent from year to year	0	6	40	54
Better communication between agencies/partners regarding program rules and policies	0	6	37	57
More user-friendly planning and contracting software	0	10	35	55
More uniformity in rules from program to program	1	11	38	50
Simplification of rules determining participant eligibility for programs	3	10	40	48
Less complexity in entering application information for ranking	2	12	41	45
Consolidating the number of programs	7	31	33	30
Customer-focused flexibility				
Greater flexibility with regard to the timing and location of practices	2	15	41	42
Less complicated practice implementation documentation for producers	3	16	38	43
Shorter turnaround time between application and funding	14	16	40	30
Less generic information and more individual producer-specific information in contracts	7	25	46	22
Individually tailored conservation plan narratives rather than national narratives	8	25	38	30
Funding allocated more towards establishing new practices rather than maintaining or enhancing existing practices	10	34	36	19
Several application deadlines throughout the year rather than just once a year	22	24	33	22

“They’ve touched on CART, and CD and I can see the vision the agency thinks they’re going to get out of all that stuff. But my goodness, we just took our job and made it a thousand times harder and longer. I don’t quite grasp that.”

CARBON CAPTURE AND ECOSYSTEM SERVICES PROGRAMS

Given a recent uptick in interest in agriculture's carbon sequestration potential and the proliferation of private-sector programs engaged in developing carbon markets, the survey included questions about privately funded carbon and ecosystem service payment programs. Respondents were asked how knowledgeable they were about "privately funded payments to farmers and landowners for carbon capture and other ecosystem services, such as programs offered through TruCarbon, IndigoAg, AgoroYara, ESMC, Nori, Gradable, etc." rated on a five-point scale from "not at all knowledgeable" to "very knowledgeable." The results indicated low levels of knowledge among conservation practitioners, with 64% answering "not at all knowledgeable," 26% answering "slightly knowledgeable," 8% answering "somewhat knowledgeable," 2% answering "knowledgeable," and less than 1% answering "very knowledgeable" (table 6).

TABLE 6

Knowledge of privately funded carbon capture and ecosystem service payment programs.

Level of Knowledge	%
Not at all knowledgeable	64
Slightly knowledgeable	26
Somewhat knowledgeable	8
Knowledgeable	2
Very knowledgeable	0

Three questions asked about their perspectives on such programs (table 7). Participants were asked "Are farmers you work with inquiring about privately funded ecosystems service payment programs?" with 27% answering "yes," 53% answering "no," and 20% answering "don't know." When asked "Do you think such programs have potential to make positive impacts on conservation practice adoption?" 51% answered "yes," 11% answered "no," and 38% answered "don't know." In response to the question "Would you like to receive training and information to help you assist farmers and landowners when they ask about privately funded ecosystems service payment programs?", 61% of participants answered "yes," while 16% answered "no," and 23% answered "don't know." Thus, results point to a substantial amount of interest in learning more about these types of programs and their potential impact on conservation adoption.

"We are just starting to hear about carbon markets and climate-friendly farming...The history of politics in climate considerations is still very much a trigger for conflict for public sector employees."

TABLE 7

Perspectives on privately funded carbon capture and ecosystem service payment programs.

Question	Yes (%)	No (%)	Don't Know (%)
Are farmers you work with inquiring about privately funded ecosystems service payment programs?	27	53	20
Do you think such programs have potential to make positive impacts on conservation practice adoption?	51	11	38
Would you like to receive training and information to help you assist farmers and landowners when they ask about privately funded ecosystems service payment programs?	61	16	23

CLIMATE CHANGE AND CONSERVATION OUTREACH

Because the USDA has been placing renewed emphasis on climate-smart agriculture, the CPP survey included four questions related to climate change and conservation outreach. The short question set began with the question, “Does discussion of climate change help engage farmers/landowners in conservation?” Just 19% of respondents answered “yes,” while 59% answered “no” and 22% answered “don’t know” (table 8). Responses were similar for the second question, “Does discussion

“In my area climate change is still a hot-button/divisive issue. Some farmers are strongly nonbelievers, and discussing the ‘climate change’ aspects of ag can bring any conversations to a halt.”

of climate change help get conservation on the ground?”; 18% answered “yes,” 57% answered “no,” and 24% answered “don’t know.” Thirty-seven percent of respondents indicated that they were “comfortable offering technical assistance about climate-smart agriculture,” while 45% were not comfortable and 18% didn’t know. When asked if they would “like to receive training and information about climate-smart agriculture,” 68% said that they would, 19% said that they would not, and 14% did

not know. Thus, a majority of conservation practitioners surveyed indicated that discussion of climate change was not helpful for engaging with farmers and landowners, but an even greater majority expressed a desire to receive training about climate-smart agriculture.

TABLE 8

Perspectives on discussions with farmers involving climate and agriculture.

Question	Yes (%)	No (%)	Don’t Know (%)
Does discussion of climate change help engage farmers/landowners in conservation?	19	59	22
Does discussion of climate change help get conservation on the ground?	18	57	24
Are you comfortable offering technical assistance about climate-smart agriculture?	37	45	18
Would you like to receive training and information about climate-smart agriculture?	68	19	14



BACKGROUND TRAINING

Another goal of the CPP was to determine what types of education and training background conservation practitioners had, and their interest in attending professional development activities on various topics. Survey respondents were asked to report their level of training on several subjects on a four-point scale from “no training at all” to “a lot of training.” The top five subjects that respondents had some or a lot of training on were soil science (84%), environmental science (79%), water resources management (74%), agronomy (74%), and wildlife management (64%) (table 9). Respondents had the least amount of training in psychology (25%), rural sociology/sociology (26%), marketing/sales (30%), and urban conservation (32%).

“The VAST majority of conservation professionals are being trained to do ‘conservation by computer’ rather than walking the land.”

TABLE 9

Educational and training background.

Subject	No Training at All (%)	Very Little Training (%)	Some Training (%)	A Lot of Training (%)
Soil science	3	13	52	32
Environmental science	4	17	46	33
Water resources management	5	21	49	25
Agronomy	8	18	43	31
Wildlife management	9	27	36	29
Agricultural engineering	15	22	36	27
Communications	9	29	50	13
Forestry	13	31	45	12
Animal ecology	16	36	31	17
Animal science/livestock management	13	40	38	9
Agricultural economics/economics	15	41	40	4
Urban conservation	29	39	25	6
Marketing/sales	31	40	25	5
Rural sociology/sociology	30	44	22	4
Psychology	36	40	22	3

INTEREST IN PROFESSIONAL DEVELOPMENT

Respondents were then asked to indicate how interested they would be in attending professional development activities focused on several different topics. Answers were indicated on a five-point scale from “not at all interested” to “very interested.” The top five subjects that received interested or very interested ratings were wildlife habitat management (65%), agricultural technology (59%), agricultural production practices (58%), precision conservation technology (e.g., Agricultural Conservation Planning Framework) (56%), and economics of agriculture (56%) (table 10). Of the subjects listed, respondents had the least interest in learning more about marketing/sales (29%), media communications strategies (30%), grant writing (31%), urban conservation (32%), and trust building strategies (35%).

TABLE 10

Level of interest in professional development activities.

Activity	Not at All Interested (%)	Slightly Interested (%)	Somewhat Interested (%)	Interested (%)	Very Interested (%)
Wildlife habitat management	4	10	22	39	25
Agricultural technology	4	14	23	42	17
Agricultural production practices	5	13	24	42	16
Precision conservation technology (e.g., Agricultural Conservation Planning Framework)	4	15	25	35	22
Economics of agriculture	5	12	28	41	15
Conservation planning	5	12	28	34	22
Soil science	4	12	29	35	20
Precision agriculture technology	6	15	25	36	18
Water resources management	6	17	24	37	16
Project management	8	15	25	35	17
Leadership	8	18	26	35	14
Engineering	14	21	20	31	15
Promoting behavior change	15	18	24	27	17
In-person communications strategies and skills	12	20	25	31	12
Carbon markets	16	20	25	22	17
Ecosystem services markets	16	21	26	21	16
Trust building strategies	15	19	31	24	11
Urban conservation	19	24	24	21	11
Grant writing	25	21	22	21	10
Media communications strategies	15	25	31	20	9
Marketing/sales	17	24	30	23	6

TABLE 11

Participation and interest in professional certification programs.

Question	Yes (%)	No (%)	Don't Know (%)
Does your organization currently offer opportunities for professional certification, either in-house or through credits from other sources?	59	24	17
Have you participated in a professional certification program, either in-house or through credits from other sources?	64	31	6
Do you currently track your professional development hours/ credits/activities?	63	35	2
Would you be interested in participating in a certification program for conservation practitioners?	59	20	21

Survey participants were also asked about their potential interest in the development of a formal training certification program for conservation practitioners, which was described as being “similar to the certified crop adviser program in that it would offer continuing education in relevant conservation topics.” While the majority (64%) of participants indicated that they had access to or had already participated in a professional certification program, 59% also expressed interest in participating in a formal certification program specifically for conservation practitioners (table 11). When asked “Does your organization currently offer opportunities for professional certification, either in-house or through credits from other sources?” 59% answered “yes,” while 24% answered “no” and 17% answered “don’t know.” Participants were also asked “Have you participated in a professional certification program, either in-house or through credits from other sources?” Sixty-four percent answered “yes,” while 31% answered “no,” and 6% answered “don’t know.” Sixty-three percent of participants indicated that they currently track their professional development hours/credits/activities, while 35% do not and 2% did not know.

“A national conservation planner certification for use by SWCDs and others would be helpful. School/education can only take one so far. This field gets complicated quickly.”

SELECTED RESPONDENT CHARACTERISTICS

Survey respondents ranged in age from 22 to 75 years old with an average age of 44 years. Fifty-seven percent of respondents identified as male (table 12), and 36% identified as female. One respondent identified as nonbinary, and seven preferred not to answer the gender question. The majority of respondents (60%) reported having obtained a bachelor’s degree (table 13), and 19% reported having obtained a graduate or professional degree. Ten percent reported having attended some college, while 8% had attended some graduate school. Four percent had earned a high school diploma or equivalent.

TABLE 12

Respondent gender.

Gender	%
Male	57
Female	36
Nonbinary	1
Prefer not to answer	7

TABLE 13

Respondent education level.

Education	%
Less than high school	0
High school graduate (or equivalent)	4
Some college, no degree	10
Bachelor’s degree	60
Some graduate school	8
Graduate or professional degree	19



TABLE 14

Respondent experience in agriculture.

Experience	%
Any of your close family members or friends currently farm	73
You regularly visited a farm as a child/youth	63
You lived on a farm growing up	54
You currently live on a farm	35
You currently farm as an occupation part-time	27
You are a nonoperator landowner	16
Outside of your profession you have little or no background in agriculture/farming	16
You farmed as an occupation (full or part-time) in the past, but not now	14
You currently farm as an occupation full-time	3

Note: Participants were asked to “check all that apply” for this question, so the percentages do not add to 100.

The survey asked conservation practitioners to indicate their level of experience with agriculture. Participants were asked to “check all that apply” for this question (table 14). Most respondents had substantial agricultural backgrounds. Seventy-three percent of participants reported having either close family members or friends that currently farm. The majority of participants reported having been exposed to farming early in life, with 63% having regularly visited a farm as a child/youth and 54% having lived on a farm growing up. Thirty-five percent reported currently living on a farm, while 27% reported currently farming as a part-time occupation, and 3% reporting currently farming full-time. Sixteen percent identified as nonoperating landowners, and 14% identified as having farmed either part-time or full-time in the past but not currently. Just 16% of conservation practitioners reported that outside of their profession, they had little or no background in agriculture/farming.

Conservation practitioners reported a wide range of years of experience in their profession, from less than a year to 46 years, with the average length of experience being 15 years. Survey respondent distribution among the five conservation organizations was: NRCS (42%), SWCDs (38%), state conservation agencies (8%), Pheasants Forever (7%), and watershed coordinators (6%) (table 15). Distribution of respondents among the six states was 27% from Missouri, 21% from Illinois, 14% from Wisconsin, 13% from Iowa, 13% from Indiana, and 13% from Minnesota (table 16).

TABLE 15

Respondent organization.

Organization	%
NRCS	42
Soil and Water Conservation Districts	38
State conservation agencies	8
Pheasants Forever	7
Watershed Coordinators	6

TABLE 16

Respondent state.

State	%
Missouri	27
Illinois	21
Wisconsin	14
Iowa	13
Indiana	13
Minnesota	13

Summary and Conclusions

The inaugural CPP and the focus groups that were conducted to help develop it provided numerous insights into conservation practitioners' perspectives on their work with farmers and landowners. Conservation practitioners from across the Upper Mississippi Watershed shared their thoughts about the strengths and challenges of different programs and engagement approaches and ideas for improvements. The CPP also identified areas of professional development interest. This concluding section highlights and summarizes key findings and outlines next steps for the CPP.

Key Finding #1: In-person work with farmers and landowners, whether in the office or in the field, is most effective. In both the focus groups and the survey responses, this theme rose to the top. Face-to-face approaches were cited as the most effective means of both starting relationships, developing trust, and working over the longer-term to get practices on the ground. Conservation practitioners also shared that they feel most satisfied with their jobs when they are helping farmers and landowners directly. That said, data from both the focus groups and the survey indicated that there are a number of factors that limit their ability to do that one-on-one work, including insufficient staff levels, staff turnover, and excessive paperwork. These results point to a critical need to improve conservation practitioners' capacity to engage with their customers more; this would likely lead to both increased conservation practice implementation and greater job satisfaction.

Key Finding #2: Some programs are easier to administer than others. Similarly, both focus group and survey data indicated that relative ease or difficulty of program administration may affect capacity to implement conservation practices. Focus group participants highlighted federal programs as particularly time-consuming, especially the Conservation Stewardship Program, and shared that the time that they have to invest in some programs can limit their ability reach customers. A major theme in this area was excessive paperwork. Conservation practitioners indicated that paperwork can be onerous to them. But perhaps of greater concern was the finding that the number and length of forms and documentation can be discouraging to farmers and landowners, leading them to give up on the process. On the other hand, data indicated that other programs, in particular state-level programs, conservation technical assistance, and private-sector programs, were relatively easier to implement and perhaps more effective. These results point to a need to learn from more streamlined programs.

Key Finding #3: Conservation practitioners provide insight on how to improve programs. Conservation practitioners are the people who best understand the strengths and weaknesses of the programs that they administer as they work with their farmer and landowner customers to implement soil and water best management practices. The survey items that were derived from the focus groups identified numerous strategies to streamline the conservation implementation process for both conservation practitioners and their customers. The findings highlight potential areas for improvement including consistency in rules and policies between programs, communication about new rules long before they are adopted, and less complicated documentation for customers, indicating a need for more systematic listening to conservation practitioners' ideas for potential changes.

Key Finding #4: Interest in professional development is high. Several question sets explored potential demand for professional development, and demand appears to be high. Wildlife habitat management, precision agriculture and precision conservation, carbon markets, and climate-smart agriculture were just some of the areas that conservation practitioners indicated strong interest in. A solid majority indicated interest in a conservation certification programs. These results strongly suggest that conservation practitioners are committed to honing their craft to be more effective.

Key Finding #5: Respondents appreciated the opportunity to share their perspectives. We received positive feedback in both the focus groups and in the survey comments. Many conservation practitioners expressed that there is a need for a periodic survey of conservation practitioners and they are looking forward to seeing the results.

“You did an excellent job of hitting the hot topics from an employee field office perspective.”

“I would say it’s a terrific idea. I think it’s really great knowledge, especially if it can be shared... after the fact as well. I know that everyone likes to see the results, right?”

These are just some of the major high-level findings from the first CPP. Following this basic analysis of the data received from the first CPP, we will conduct further in-depth analysis of both the focus group and survey data to investigate potential comparisons, relationships, and patterns. The results of those analyses will be presented to the conservation and academic communities in journal articles and possibly follow-on reports. We also plan to develop a policy implications report based on the focus group and survey data with recommendations on how to best implement conservation practitioner perspectives and recommendations into conservation and farm policy. Based on the success of this first survey, we plan to design and send out a new CPP in 2023, potentially to a wider audience than our original sample.

We are deeply grateful to the many conservation practitioners who took the time to share their perspectives. We are especially appreciative of the focus group participants who provided such thoughtful discussion and helped to craft the survey instrument. We believe that the conservation practitioner is the most important part of the soil and water conservation delivery system. We hope that the data presented in this report serves to elevate their voices so their experiences and ideas can be used to improve policies, programs, and soil and water conservation outcomes.

