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INTRODUCTION

In 2021, as part of the phasing of the Diversity, Equity, and Inclusion (DEI) cross-Society initiative for ASA, CSSA, and SSSA (Societies), a survey was developed and conducted across the full membership of the three Societies. The American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA), have made the commitment to enhancing the experiences, opportunities, and safety of all members through creating a diverse, inclusive, and equitable environment in our scientific fields of study and throughout the Societies. In developing our DEI Initiative, it’s important to gain an understanding of the issue’s members face, where they are in their journey on diversity, equity, and inclusion, and how they view DEI efforts within the Societies. To achieve this, a survey was developed and sent to members that assessed:

- Members’ understanding of DEI concepts,
- DEI-related issues members face,
- How the Societies are doing as diverse, equitable, and inclusive organizations,
- Priorities for the Societies in DEI-focused programs and activities,
- Opportunities for DEI-specific professional development, and
- Awareness of DEI resources within the Societies.

The DEI survey results have been analyzed and summarized in this report and will be used as the cornerstone of recommendations for presentation to the ASA, CSSA, and SSSA Boards of Directors. Additionally, they will be the roadmap for the next phase of the initiative to bring long-term actions to support DEI in our science community.

SURVEY OVERVIEW

The survey was designed by the DEI Project Consultant, Elizabeth Gillispie, PhD, and staff members Susan Chapman, CAE, Director of Member Services and Beth Jacques, Manager of Membership and Data Analytics. A pre-survey was sent to members of the Diversity, Women in Science, Early Career Members, and Graduate Student committees, Undergraduate Officers/Advisors, SSSA Recognition and Representation Task Force, and Specialty Group leaders in February of 2021. The three Society Presidents, Jeff Volenec (ASA), Vara Prasad (CSSA), and April Ulery (SSSA) also reviewed and provided feedback to shape the survey. The pre-survey helped determine if questions were clear and understandable, response options were complete, survey length was appropriate, and provided other feedback to assist in making the survey user friendly.

The final survey included both quantitative, categorical questions (i.e., strongly agree to strongly disagree) and open-ended response questions. This survey was distributed in March 2021 via the Societies email software to all Society members with an explanation of the survey, on behalf of the three Presidents with a request to participate. Two additional emails were sent over the course of three weeks to those that had not opened the email or clicked on the survey link. To ensure a strong response rate, survey participants were able to sign-up for a drawing for one of five $100 VISA gift cards, upon completion of the survey. This sign-up was not tied to the individual survey results.

Survey results were collected through the Societies SurveyMonkey account. Results were reviewed, summarized and interpreted by the DEI Project Consultant and Staff. Cross-tabs referenced in this report are available on request.
METHODOLOGY OF RESULTS

The survey request was sent to 7,721 members (population size) with 764 survey participants (sample size) - a response rate of 9.9%. At a 95% confidence level, with a margin of error of +/- 5%, the required sample size was 366. With the actual sample size, the margin of error is 4%. The commonly used confidence level is 95% with a margin of error between 4-8%. Survey results were rounded to the nearest tenth of a percentage.

Definitions and Examples

Population size: The total number of people in the group to be studied. For example, to study all adults in the U.S., the population size would be approximately 209 million. Similarly, to survey all employees in a company, population size is the total number of employees.

Margin of error: A percentage that indicates how much the survey results will reflect the views of the overall population. The smaller the margin of error, the closer to having the exact answer at a given confidence level.

Sampling confidence level: A percentage that reveals how confident one can be that the population would select an answer within a certain range. For example, a 95% confidence level means that one can be 95% certain the results lie between x and y numbers.

DEMOGRAPHICS

Member demographic comparisons were based on the March 31, 2021 membership report. Survey participant demographics are compared to the total ASA, CSSA, and SSSA membership demographics and highlights the differences between membership and survey participants.

Data Legend

The differences between survey participants and membership are highlighted in green (more survey participants than membership) and red (less survey participants than membership). Bolded categories indicate statistical significance. At least 30 participants were needed for a category’s results to be reliable enough to extrapolate to the population. If a category had more than 30 participants, results can be confidently compared to members (confidence level > 99%). Additionally, the SurveyMonkey analysis required 30 responses for the response category to be statistically significant. Further information about interpretation of SurveyMonkey statistical analytics can be found here: SurveyMonkey Statistical Significance Help Page.

Gender

Gender composition of survey participants differed from Society members in all categories. Survey participants were more likely to identify as gender non-binary, woman, or prefer not to answer than membership. The only gender category with a smaller percentage of participants compared to membership was Man. There were not enough gender non-binary survey participants for their results to be statistically significant. 2.8% of members do not have a gender declared on their member profile.
**Table 1. Gender data comparison of survey participants and membership.**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Membership</th>
<th>Survey</th>
<th>Difference in Survey Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender non-binary</td>
<td>0.1%</td>
<td>1.4%</td>
<td>+1.3%</td>
</tr>
<tr>
<td>Man</td>
<td>72.1%</td>
<td>55.9%</td>
<td>-16.2%</td>
</tr>
<tr>
<td>Woman</td>
<td>27.8%</td>
<td>37.6%</td>
<td>+9.8%</td>
</tr>
<tr>
<td>Prefer not to answer/Other</td>
<td>0.1%</td>
<td>5.1%</td>
<td>+5.0%</td>
</tr>
</tbody>
</table>

*Bold categories are statistically significant

**Ethnicity**

Ethnicity categories for the survey and our membership profile are based on the 2010 US Census, with the addition of the Multi-Racial and Prefer not to answer categories in the survey (which is not currently in the membership profile option). Note that 42.2% of members do not have an ethnicity on their member profile.

The largest represented membership categories of Caucasian and Asian made-up smaller percentages of the survey participants, with minority groups mostly seeing an increase. There were not enough American Indian or Alaska Native, Black or African American, Native Hawaiian or other Pacific Islander, or Multi-Racial or Other survey participants for their results to be statistically significant.

**Table 2. Ethnicity data comparison of survey participants and membership.**

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Membership</th>
<th>Survey</th>
<th>Difference in Survey Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>0.3%</td>
<td>0.3%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>10.2%</td>
<td>8.5%</td>
<td>-1.7%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>2.9%</td>
<td>4.1%</td>
<td>+1.2%</td>
</tr>
<tr>
<td>Caucasian or White</td>
<td>80.0%</td>
<td>65.6%</td>
<td>-14.4%</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>3.8%</td>
<td>8.3%</td>
<td>+4.5%</td>
</tr>
<tr>
<td>Native Hawaiian or Other Pacific Islander</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Multi-Racial or Other</td>
<td>2.4%</td>
<td>3.2%</td>
<td>+0.8%</td>
</tr>
<tr>
<td>Prefer not to answer (no data provided)</td>
<td>0.0%</td>
<td>9.7%</td>
<td>+9.7%</td>
</tr>
</tbody>
</table>

*Bold categories are statistically significant. It is important to note that with only 42.2% of members providing ethnicity information, it is unknown if the percentages reflect the membership. Members who did not provide ethnicity data in their profile are listed in the prefer not to answer category for “Membership.”

**Age**

Members aged 18-44 years participated in the survey at higher rates than membership composition. The biggest difference was the 25–34-year-old category, which had a +15.1% increase in survey participation versus membership. It is important to note that birthdate used to be a required field for membership applications, so most of the membership age data is for longer-tenured members. 51.0% of members have not provided their age on their profile and many of these are likely younger members based on membership tenure. There were not enough 18–24-year-old participants for their results to be statistically significant.
Table 3. Age data comparison of survey participants and membership.

<table>
<thead>
<tr>
<th>Age</th>
<th>Membership</th>
<th>Survey</th>
<th>Difference in Survey Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24 years</td>
<td>0.6%</td>
<td>4.3%</td>
<td>+3.8%</td>
</tr>
<tr>
<td>25-34 years</td>
<td>7.6%</td>
<td>22.7%</td>
<td>+15.1%</td>
</tr>
<tr>
<td>35-44 years</td>
<td>12.2%</td>
<td>18.8%</td>
<td>+6.7%</td>
</tr>
<tr>
<td>45-54 years</td>
<td>16.7%</td>
<td>13.7%</td>
<td>-2.9%</td>
</tr>
<tr>
<td>55-64 years</td>
<td>27.3%</td>
<td>21.8%</td>
<td>-5.6%</td>
</tr>
<tr>
<td>65+ years</td>
<td>35.8%</td>
<td>18.7%</td>
<td>-17.1%</td>
</tr>
</tbody>
</table>

*Bold categories are statistically significant*

Society Memberships

Of the survey participants, 75.3% are members of ASA, 57.2% of CSSA, and 67.0% of SSSA. This is very close to the composition of Society members overall with 73.1% of members belonging to ASA, 55.2% to CSSA, and 66.8% to SSSA.

Member Type

Fewer undergraduate students participated in the survey when compared to membership demographics. There was more participation from graduate students, professionals, and emeritus members. There were not enough undergraduate student members for their results to be statistically significant.

Table 4. Member type data comparison of survey participants and membership.

<table>
<thead>
<tr>
<th>Member Type</th>
<th>Membership</th>
<th>Survey</th>
<th>Difference in Survey Participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>5.4%</td>
<td>1.4%</td>
<td>-4.1%</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>18.6%</td>
<td>19.8%</td>
<td>+1.2%</td>
</tr>
<tr>
<td>Professional</td>
<td>70.0%</td>
<td>72.7%</td>
<td>+2.7%</td>
</tr>
<tr>
<td>Emeritus</td>
<td>6.0%</td>
<td>6.2%</td>
<td>+0.2%</td>
</tr>
</tbody>
</table>

*Bold categories are statistically significant*

Career Level

Of survey participants, 0.9% were at the undergraduate student career level, 18.5% at the graduate student level, 15.5% at the early career (<7 years post final degree), 19.8% at mid-career (8-20 years), 36.3% at late-career (20+ years), and 9.0% were retired. Career level data is not captured in the member profile, so a comparison is not provided.
DEI AND ME

Members’ personal experiences and understandings with diversity, equity, and inclusion were evaluated by their responses to four questions. The goal was to gain an understanding of where members are in their DEI journey. Questions and responses are:

What does success look like for you upon completion of any specific DEI education and training?
Respondents were able to select multiple options for this question along with an open-ended “other” option. The majority (65%) noted that “increasing confidence in addressing DEI workplace issues” was the driver of success for completing any DEI education and training. Growth in personal DEI journal (52%) and strengthening my comfort level in having DEI conversations (54%) followed. Over one-third of participants (37%) selected all responses.

The open-ended “other” category within this survey question received 129 responses and provided a broad spectrum of viewpoints – ranging from DEI training is unnecessary to having actionable goals, and a better understanding of DEI topics/other topics. The open-ended questions were categorized based on similarity. The majority of respondents (41% of survey participants based on the top three categories) state that they either do not believe DEI training is needed (19%) or consider “Actionable goals” (13%) and “Better understanding of DEI topics” (9%) as top measures for success upon completion of DEI training and education. Many respondents were unsure what success actually would look like, showing the future need for guidance and success measurements for members.

Figure 1. Survey Question 1: What does success look like for you upon completion of any specific DEI education and training. There was a total of 129 responses.
Below are selected quotes from participants who provided additional thoughts on what success looks like for them upon completion of any specific DEI education and training.

“Understanding how I can promote change during my early career when tenured faculty and department chairs resist change.” - *Graduate Student, Woman, White*

“Increased awareness and sensitivity. For example, prior to DEI training, I was not familiar with microaggression.” - *Late-career, Man, Racial Ethnicity Prefer not to answer*

“Feeling like a champion in the space and an advocate for tough conversations.” *Graduate Student, Women, Black or African American*

“Understanding people that do not understand DEI issues.” - *Late-career, Man, Hispanic or Latino*
**Member Confidence Levels with DEI**

The survey approached understanding the insight into the comfort level members have with facilitating DEI conversations and understanding concepts related to DEI through a series of questions.

**How confident are you in your ability to facilitate DEI conversations?**

According to respondents, just over half are moderately to highly confident in their ability to facilitate DEI conversations. Men and Late Career Stage survey participants are more likely to be confident in their ability to facilitate DEI conversations. Graduate students are the least confident, where confidence level increases as members develop in their career stage.

![Confidence Levels Table](image)

*Figure 3. Survey Question 2: How confident are you in your ability to facilitate DEI conversations. Survey participants rated their confidence level, and the data was cross examined with gender and career stage. Percentages are the total amount of participants that selected each category. Gender non-binary and undergraduate categories are not significant (n<30) when comparing to others.*
How comfortable are you in your understanding of the following Diversity, Equity, and Inclusion related concepts?
Members were also asked how comfortable they feel in their understanding of various DEI-related concepts (definitions below). The responses to this question provide information on the understanding of the prominent topics within the DEI umbrella. Overall, the concepts with the highest comfort level with understanding of concepts are harassment (82%), Inclusive Workplace Practices (70%), and Systemic Racism (67%). The lowest comfort level of understanding are Bystander Intervention (51%), Allyship (57%), and Microaggressions (60%). The weighted average ranges between 3.54 to 4.21 for each concept (1=no understanding and 5=extensive understanding). Very few across all cohorts were unfamiliar or had no understanding with any of the concepts.

Definitions:

**Power and Privilege** the exclusive access or availability to material and immaterial resources based on the membership to a dominant social group

**Cultural Humility** the process of self-reflection and self-critique whereby the individual not only learns about another's culture, but one that starts with an examination of her/his own beliefs and cultural identities

**Microaggressions** the verbal, nonverbal, and environmental slights, snubs, insults, or belittlement, whether intentional or unintentional, which communicate hostile, derogatory, or negative messages to target persons based solely upon discriminatory belief systems

**Inclusive Workplace Practices** environments in which any individual or group can be and feel welcomed, respected, supported, and valued as a fully participating member

**Implicit Bias** negative associations that people unknowingly hold and that affect understanding, actions, and decisions

**Allyship** supporting individuals and/or groups, other than one's own, who have been marginalized, overlooked, or mis-treated

**Harassment** the use of comments or actions that can be offensive, embarrassing, humiliating, demeaning, and unwelcome

**Bystander Intervention** the ability to recognize a potentially harmful situation or interaction and choosing to respond in a way that could positively influence the outcome

**Systemic Racism** the policies and practices that exist throughout a whole society or organization, and that result in and support a continued unfair advantage to some people and unfair or harmful treatment of others based on race
How comfortable do you feel in your understanding of the following Diversity, Equity, and Inclusion related concepts?

- No or slight understanding
- Some understanding
- Good or extensive understanding
- I have not heard of this concept

<table>
<thead>
<tr>
<th>Concept</th>
<th>No or Slight</th>
<th>Some</th>
<th>Good or Extensive</th>
<th>I Have Not Heard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harassment</td>
<td>4%</td>
<td>13%</td>
<td>82%</td>
<td>1%</td>
</tr>
<tr>
<td>Inclusive Workplace Practices</td>
<td>7%</td>
<td>22%</td>
<td>70%</td>
<td>1%</td>
</tr>
<tr>
<td>Systemic Racism</td>
<td>11%</td>
<td>21%</td>
<td>67%</td>
<td>1%</td>
</tr>
<tr>
<td>Implicit Bias</td>
<td>9%</td>
<td>23%</td>
<td>66%</td>
<td>1%</td>
</tr>
<tr>
<td>Power and Privilege</td>
<td>8%</td>
<td>27%</td>
<td>62%</td>
<td>3%</td>
</tr>
<tr>
<td>Cultural Humility</td>
<td>10%</td>
<td>26%</td>
<td>61%</td>
<td>3%</td>
</tr>
<tr>
<td>Microaggressions</td>
<td>12%</td>
<td>26%</td>
<td>60%</td>
<td>2%</td>
</tr>
<tr>
<td>Allyship</td>
<td>13%</td>
<td>26%</td>
<td>57%</td>
<td>4%</td>
</tr>
<tr>
<td>Bystander Intervention</td>
<td>15%</td>
<td>32%</td>
<td>51%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Figure 4. Survey Question 3: How comfortable do you feel in your understanding of the following Diversity, Equity, and Inclusion related concepts. Survey participants rated their understanding level on a scale of 1 (no understanding) to 5 (extensive understanding). Categories were combined, where the red bars represent combined scales 1+2, grey is scale 3, and green represents combined scales 4+5. Percentages are the total amount of participants that selected each category. Light grey bars and percentages to the far right are participants who have not heard of this concept.*

Prevalent DEI-Related Issues Facing Members

**What would you describe as the most prevalent DEI-related issues people in your position face?**

Survey participants were asked to choose all prevalent DEI-related issues people in their position face and then asked to provide additional thoughts as open-ended responses on these issues (survey questions 4 and 5). Above all other options, Implicit Bias was the most prevalent issue (51%) with recruiting diverse candidates (46%) and understanding other perspectives (45%) with creating inclusive workplaces (44%) following very closely.
What would you describe as the most prevalent DEI-related issues people in your position face?

Implicit bias: 51%
Recruiting diverse candidates: 46%
Understanding other perspectives: 45%
Creating inclusive workplaces: 44%
Gender issues: 36%
Microaggressions: 36%
Creating a mentoring/advocate culture: 35%
Understanding racism: 32%
Racial discrimination: 26%
Facilitating DEI initiatives: 25%

Figure 5. Survey Question 4. What would you describe as the most prevalent DEI-related issues people in your position face?

Overall, survey participants considered implicit bias the most prevalent issue people in their position face. Survey responses were cross-referenced with gender, ethnicity, and career level to better understand the distribution across demographics. Man, woman and prefer not to answer were the only gender groups that were considered statistically significant (n > 30). American Indian/Alaska Native and Native Hawaiian ethnicities as well as the undergraduate career level were considered not significant when cross-referencing survey responses to Question 4.

According to cross referencing data, “understanding other perspectives” was considered an equally prevalent issue across man, woman, non-binary, and prefer not to answer gender demographics. Overall, women were twice as likely as men to consider microaggression and gender issues a prevalent DEI issue. Though both men and women consider “recruiting diverse candidates” a prevalent issue, women tend to consider this a more prevalent issue than men.

On average, Asian members considered “understanding racism” a more prevalent DEI-related issue than any other ethnicity, while Black or African American members considered “creating a mentoring/advocate culture” a more prevalent DEI-related issue. Asian, Hispanic and Black or African American members are more likely to consider “racial discrimination” the most prevalent issue people in their position face when compared to Caucasian or White members.

Lastly, early, mid, late and retired career members consider “recruiting diverse candidates” more of a prevalent issue than graduate students. One reason could be early career and later members are more exposed to hiring and the challenges faced with recruiting and retaining diverse talent.

Please provide any additional thoughts on DEI-related issues that people in your position face and/or you feel unprepared to address.

A follow-up question was asked to focus on additional thoughts that may not have been captured in Question 4. There were 210 open-ended responses that were categories based on similarities over eleven categories. The
The greatest issues were around addressing bias (61 comments), awareness (or lack of acknowledgement of DEI-related issues) (34 comments) and working to create greater institutional change (23 comments) around DEI-related issues.

**Survey Question 5: Categorized Open-Ended Responses**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addressing Bias</td>
<td>61</td>
</tr>
<tr>
<td>Awareness</td>
<td>34</td>
</tr>
<tr>
<td>Institutional Change</td>
<td>23</td>
</tr>
<tr>
<td>DEI is overhyped</td>
<td>20</td>
</tr>
<tr>
<td>Pipeline</td>
<td>15</td>
</tr>
<tr>
<td>Actionable steps</td>
<td>12</td>
</tr>
<tr>
<td>Reverse discrimination</td>
<td>7</td>
</tr>
<tr>
<td>General</td>
<td>6</td>
</tr>
<tr>
<td>Survey</td>
<td>3</td>
</tr>
<tr>
<td>Science not DEI</td>
<td>2</td>
</tr>
</tbody>
</table>

*Figure 6. Survey Question 5 Categorized Responses. Responses for the statement, “Please provide any additional thoughts on DEI-related issues that people in your position face and/or you feel unprepared to address,” were categorized based on reoccurring themes around the responses. Eleven categories were developed, and responses were then assigned to a corresponding category for analysis.*

Below are selected quotes from members who provided additional thoughts on DEI-related issues that people in their position face and/or feel unprepared to address.

"Age discrimination. Older people are excluded or ignored, and reference always made to how old they are (microaggressions)." - Late Career, Woman, White

“What a waste of time, money and energy. You all must be too busy to do real work! Get you head out of your *sses so you can think clearly with some common sense. You are embarrassing." - Late-career, Gender prefer not to answer, Racial Ethnic Group prefer not to answer

“Too often, the person/people who are treated poorly have to advocate for themselves. And too often, they have to "teach" the rest of the world. Unfair, exhausting, and causes more of the problems of struggle for them." - Mid-career, Gender prefer not to answer, Racial Ethnic Group prefer not to answer

“As a white male who considers himself fairly open, I have had a lot of learning over the last few years about what I didn’t know and that I need to build my zone of empathy because I have low experience in being judges against. And what I have been learning about is how to become an effective advocate and recognize implicit biases and microaggressions that I have not paid attention to in the past I have a powerful voice and I need to learn to use it effectively to support." - Mid-Career, Man, White
DEI WITHIN THE SOCIETIES

Diversity, equity and inclusion within the Societies was also assessed. Members were asked to rate on a scale of 1 (strongly disagree) to 5 (strongly agree) how strongly they agreed to statements pertaining to DEI in the Societies. The total percentage of participants that agree (scale number 4) and strongly agree (scale number 5) were combined, and strongly disagree (1) and disagree (2) combined and provided in the graph below (Figure 7).

There were two types of questions – one set focusing on how individuals felt within the Societies and another set focusing on their viewpoints of the Societies around the topic of DEI.

Viewpoints of Society-focused statements:

The majority of the survey participants agreed that the Societies DEI initiative should be a top priority (73%). However, less than half felt that there was a strong commitment to DEI (45%) and that was further emphasized with the statements believing the Societies provide programs and resources to foster the success of under-represented groups in our membership (36%). Even less believe the Societies provide programs and services to foster the success of under-represented groups in our sciences (beyond membership) (32%).

Viewpoints of “I” statements:

The “I” statements ranked higher than the majority of the “Society” questions with 68% being comfortable with themselves within the Societies, 60% agreeing they have opportunities in the Societies for professional success that are similar to their colleagues, and 58% feel a sense of belonging and value among peers at the Annual Meeting.

Men were more in agreement with all statements than women with the exception of the statement “the Societies DEI initiative should be a top priority” – which had higher agreement with women. Gender non-binary participant survey answers were not statistically significant and therefore could not be compared in this cross examination.

In general, agreement with all statements tended to increase with age, member type, and career level with the exception of the statement “the Societies DEI initiative should be a top priority” – which had higher agreement than for younger age groups, member types (student), and career level.

Across ethnicity and recalling that only Asian, Caucasian/White, and Hispanic ethnic groups had enough survey participants for results to be extrapolated to the population, white/Caucasian participants rated all statements higher than Asian or Hispanic/Latino groups with the exception of the statement “the Societies DEI initiative should be a top priority” – which had higher agreement with Asian and Hispanic/Latino groups. For most of the questions, Hispanic/Latino participants had the least agreement with the statements.
Figure 7. Survey Question 7: Rate your agreement with the following statements. Survey participants rated their agreement with 8 statements on a scale of 1 (strongly disagree) to 5 (strongly agree). Red bars represent combined scales 1 + 2, grey represents scale 3, and green represents scales 4 + 5. Percentages are the total amount of participants that selected each category.
Integration of DEI within the Societies

Members responded on a scale from 1 (not well at all) to 5 (very well) with an option to choose “do not know” for several questions regarding integration of diversity, equity, and inclusion within the programs and services of the Societies.

How well is diversity, equity, and inclusion integrated into the following:

Publications and Communications

The three publication and communication activities with the strongest agreement (not including “do not know”) that there is DEI-integration are CSA News Magazine (46%), Member Communications (42%), and Websites (37%). The three activities with the least agreement that there is integration are Podcasts (16%), Social Media (25%), and Editorial Review (27%). Of note, there is no publications/communications activity with over 50% agreement that DEI is integrated into the activities.

How well is diversity, equity and inclusion integrated into the following Society publications and communications activities?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Not very or not well</th>
<th>Somewhat</th>
<th>Well or very well</th>
<th>Do Not Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSA News Magazine</td>
<td>11%</td>
<td>21%</td>
<td>46%</td>
<td>22%</td>
</tr>
<tr>
<td>Member Communications</td>
<td>13%</td>
<td>21%</td>
<td>42%</td>
<td>24%</td>
</tr>
<tr>
<td>Websites</td>
<td>11%</td>
<td>21%</td>
<td>37%</td>
<td>31%</td>
</tr>
<tr>
<td>Publishing Opportunities</td>
<td>10%</td>
<td>14%</td>
<td>35%</td>
<td>41%</td>
</tr>
<tr>
<td>Science Stories</td>
<td>9%</td>
<td>14%</td>
<td>34%</td>
<td>43%</td>
</tr>
<tr>
<td>Editorial Review</td>
<td>10%</td>
<td>11%</td>
<td>27%</td>
<td>52%</td>
</tr>
<tr>
<td>Social Media</td>
<td>9%</td>
<td>12%</td>
<td>25%</td>
<td>53%</td>
</tr>
<tr>
<td>Podcasts</td>
<td>6%</td>
<td>8%</td>
<td>16%</td>
<td>69%</td>
</tr>
</tbody>
</table>

Figure 8. Survey Question 8: How well is diversity, equity and inclusion integrated into the following Society publications and communications activities. Survey participants rated their agreement with 8 Society activities on a scale of 1 (not well) to 5 (very well). Red bars represent combined scales 1 + 2, grey represents scale 3, and green represents scales 4 + 5. Percentages are the total amount of participants that selected each category. Member Communications includes Newsflash and Science Policy Report.
Activities and Programs

The three activities and programs with the strongest agreement (not including “do not know”) that there is DEI-integration are Annual Meeting Speakers (45%), Annual Meeting Activities (42%) and Awards (39%) and Divisions/Communities (39%). The activities and programs with the least agreement are Certification (23%), Specialty Groups (26%), and Undergraduate Student Activities (30%). It is important to note that no activities and programs have over 50% agreement that DEI is integrated.

Figure 9. Survey Question 9: How well is diversity, equity and inclusion integrated into the following Society activities and programs?

Leadership

The leadership of the divisions/communities are viewed as most reflecting DEI (35%) followed by committees (32%), editorial boards (26%) and finally the boards of directors (24%). It is important to note that none of the leadership areas, according to survey participants, reflects diversity, equity and inclusion as agreement was less than 50% in all areas.
Prevalent DEI-Related Issues Facing the Societies

The survey provided an open-ended question asking participants to describe the most prevalent DEI-related issue facing our organizations (ASA, CSSA, SSSA). This open-ended question received 354 responses. The responses were reviewed and categorized into broader areas. Comments ran the gamut of perspectives about DEI and the Societies. Categories with more responses include:

- **DEI Initiative** – Thoughts both for and against
- **Representation** - Comments from all groups, under-represented groups, white males, religion, etc.
- **Awareness** – lack of awareness of DEI issues, or want more awareness about DEI and need for the initiative
- **Pipeline** – workforce and career awareness concerns
- **Membership-Culture** – inclusivity
- **Membership-Structural** – leadership, awards, students
- **Ag and Environmental Institutions** – racism, indirect impacts on our societies
- **Mentorship** – creating mentor opportunities
- **Broad take-aways include:**
  - Respondents appreciate that the Societies are embarking on the DEI initiative
  - There is a need for Leadership to better reflect a diverse membership
  - There is racism in agriculture in general and is one of the causes of the lack of students entering the profession (and research directed to white farms, systemic racism,
  - Perception that the Societies still are an old-boys club of white males
Other clusters of comments noted a bias to scientific focus areas, not having a PhD,

Conversely, over 30 commented that there isn’t a problem and/or the Societies should move their focus back to science.

Survey Question 12: Categorized Open-Ended Responses

<table>
<thead>
<tr>
<th>Category</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEI Initiative</td>
<td>69</td>
</tr>
<tr>
<td>Representation</td>
<td>51</td>
</tr>
<tr>
<td>Awareness</td>
<td>49</td>
</tr>
<tr>
<td>Pipeline</td>
<td>47</td>
</tr>
<tr>
<td>Membership - Culture</td>
<td>44</td>
</tr>
<tr>
<td>Membership - Structure</td>
<td>40</td>
</tr>
<tr>
<td>Ag and Environmental Institutions</td>
<td>34</td>
</tr>
<tr>
<td>None</td>
<td>11</td>
</tr>
<tr>
<td>Mentorship</td>
<td>10</td>
</tr>
</tbody>
</table>

Figure 11. Survey Question 12 Categorized Responses. Responses for the question, “What would you describe as the most prevalent DEI-related issue facing our organizations (ASA, CSSA, SSSA),” were categorized based on reoccurring themes around DEI in the Societies.

Below are selected quotes from members describing what they believe are the most prevalent DEI-related issues facing our organizations (ASA, CSSA, SSSA).

“Agriculture tends to be a male-dominated field. While this is changing, the good-old boys club still persists and is noticed at annual meetings.” - Graduate Student, Woman, White

“Lack of understanding about these issues among the membership, and based on attendance at DEI sessions at meetings, a lack of interest/willingness to learn anything about them either.” - Graduate Student, Man, White

“Over-focus on the issue. We should not discriminate against anyone. That should be the focus. We should find balance and not overreact to the latest focus of liberals. We should work to not see color or gender etc.” - Late Career, Man, White

“Recruitment of the best and the brightest for agriculture, when so many want to go into IT and so forth.” - Late Career, Man, White

“The perception that the Societies are dominated by white, male membership and leadership.” - Late Career, Man, White

“Everyone is doing DEI these days, but it is overwhelmingly focused on short workshops and photo-ops that show diversity. There is little effort in measuring whether people actually deeply care for the need for DEI, or even understand why it is so desperately needed in society.” - Late Career, Woman, White

“The societies are not welcoming to alternative voices and perspectives. Diversity and inclusion does not mean letting others participate equally in what you want or mentoring members to be more like you. example: don’t help women to “lean in”. Maybe just lean out now and then and let others succeed as themselves.” - Late Career, Woman, Ethnicity Prefer Not to Answer
Discrimination within the Societies

Participants were asked if they have personally experienced discrimination in the Societies. Discrimination may be experienced in many forms such as ability or disability status, racial or ethnic identity, sex, sexual orientation, gender identity or gender expression, veteran status, marital status, national origin, age, religion, height or weight, political orientation, and social class. Because of this, a specific definition was not provided in the survey to explain what discrimination could mean for members. Therefore, participants had to conclude for themselves what discrimination experiences could be. According to the survey results, 83% of participants do not feel they have personally experienced discrimination within the Societies.

If you have experienced discrimination in the Societies, please share if you are comfortable doing so:

A follow-up question asked participants to share their personal experiences with discrimination. Note that many of the commentors indicated the discrimination they experienced was many years ago. Comments were categorized based on similarities. Implicit (30 comments) and gender (17 comments) bias were the most common areas of discrimination followed by Harassment (11 comments). There were 14 comments noting that they have not experienced discrimination in the Societies.

Below are selected quotes from members who have personally experienced discrimination in the Societies.

“I think minorities are treated as different or as if we were given a favor to participate or be included.” - Late Career, Man, Hispanic or Latino
“It’s just a small thing, but I wear a wedding ring and a session moderator asked me what my husband does when we were chatting after my talk. I casually mentioned my wife works in clinical trials, and the moderator got all tense and ended the conversation. The whole thing just felt wrong.” - Graduate Student, Woman, White

“As a person of color, I experience discrimination daily. Although I have advanced degrees people see the color of my skin first before weighing in on my qualifications and training. I feel I have to live under the grace of people in positions of power. I hope/long for a world where diversity is viewed as a catalyst for a thriving world.” - Early Career, Man, Racial Ethnic Group Not Given

“I became a CCA late in my career after being directly involved in production agriculture as well as private research for many years. Others assumed I held a degree or several degrees when in conversation. Upon learning that I did not it seemed to invalidate my contribution to the conversation.” - Late Career, Man, White

“It is very difficult / impossible for low-income people to participate in a majority of Society activities. This turns into an umbrella that disproportionately impacts many minority members of the Societies.” - Undergraduate, Woman, White

“Age discrimination but luckily I ignore it. I am almost 68 years old.” - Late Career, Man, White
MOVING FORWARD WITH DEI IN THE SOCIETIES

The survey culminates with a series of questions that will aid in driving the future direction of the DEI Initiative and form the backbone of the recommendations to be presented to the ASA, CSSA, and SSSA Boards of Directors. The questions are based on what members believe to be the future focus areas for the Societies DEI efforts.

Of the following activities, select up to three in which you believe the Societies should focus specific to our diversity, equity, and inclusion priorities.

According to survey participants, the top three activities the Societies should prioritize are Support (55%), Mentoring (52%), and Education/Training (47%) (Figure 13). Definitions for the answer options are:

- **Support**: engage and support under-represented individuals through programs and activities and develop long-term relationships with minority-serving institutions/organizations and diversity advocacy groups.
- **Mentoring**: develop mentoring programs to promote inclusive connections for all members to build their career opportunities.
- **Education/Training**: develop educational and training opportunities to increase the diversity, equity, and inclusion competency of members, leadership, and staff.
- **Plans and Policies**: Develop and implement a long-term plan to increase diversity of our membership. Ensure the policies and practices of the Societies (individually and collectively) welcome and support members of under-represented groups.
- **Conversations**: Facilitate conversations among members that lead towards greater understanding and more diverse, equitable and inclusive outcomes for members and those in our sciences.
- **Research**: Conduct and participate in DEI-related research activities, including surveys, to inform programs and activities.

Of note, there was general agreement (limited statistically significant differences) overall across these top three categories across gender, career level, and ethnicity.

![Figure 13](image-url)
Rank the areas in which the Societies should develop education/training through the Societies DEI Initiative. As Education/Training was anticipated to be a top priority by members, a survey question was created to identify the highest priority areas. Overall, the top three highest priority areas for education/training are developing inclusive workplace practices, understanding power dynamics, and facilitating conversations, respectively. When considering what developing inclusive workplace practices encompasses, all areas can fit within this area. There was agreement (limited statistically significant differences) overall across these top categories across gender, career level, and ethnicity.

<table>
<thead>
<tr>
<th>Develop inclusive workplace practices</th>
<th>Understanding power dynamics</th>
<th>Facilitating conversations</th>
<th>Transforming implicit bias</th>
<th>Understanding systemic racism</th>
<th>Responding to microaggressions</th>
<th>Managing and combating harassment</th>
<th>Fostering allyship</th>
<th>Implementing bystander intervention</th>
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<tr>
<td>Overall</td>
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<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Figure 14. Survey Question 13: Rank the areas in which the Societies should develop education/training through the Societies DEI Initiative. Survey participants ranked 10 DEI concepts (including “None”) from top priority to lowest priority. Red bars represent combined bottom 3 priorities, grey represents middle priority, and green represents the top 3 priorities. Percentages are the total amount of participants that selected each category. The graph is the scale is dark green to dark blue with dark green representing the highest priorities and dark blue representing the lowest priorities.
Awareness of DEI Resources

Are you aware of the following DEI resources in the Societies?
ASA, CSSA, and SSSA have on-going diversity, equity and inclusion programs and activities that are provided to all members. Approximately 25% of participants are unaware of any DEI resources within the Societies. The majority of members who are aware of our DEI efforts are aware of the Women in Science events at the Annual Meeting (64%), while only a small portion of members are aware of the remainder of the programs.

![Bar chart showing awareness of DEI resources](image)

Figure 15. Survey Question 22: Are you aware of the following DEI resources in the Societies.

Specialty Groups
Specialty Groups were created to enhance the social connections of members and are formed at the grassroots level. There are eight Specialty Groups currently established across the Societies. 86% of respondents are not a member of any Specialty Group. This may be due to several reasons, such as members being unaware of specialty groups, a lack of interest or need to join a specialty group, or the unavailability of a specialty group of interest. Participants were asked if there was a specialty group they would like to see developed and, if they would like to assist in starting the group, to please leave their contact information. Out of 45 responses, three members left contact information. Top specialty group themes included Black and Indigenous People of Color, Hispanics and Latinxs in Agriculture, and Scientists with Disabilities.

What Specialty Groups are you a member of within the Societies?

![Bar chart showing membership in Specialty Groups](image)

Figure 16. Survey Question 23: What Specialty Groups are you a member of within the Societies.
CONCLUSION

- While men participated in higher numbers than women, women participated at a level 10% greater than their membership composition, while men participated at a level 16% less than their membership composition.

- Non-Caucasian/White members participated at a higher level than Caucasian/White members.

- The spectrum of opinions around DEI are very broad and the majority of open-ended responses were thoughtful and provided valuable insight.

- Men were significantly more confident in their ability to facilitate DEI conversations.

- All DEI concepts were understood or heard of by a significant majority of the participants.

- The most prevalent DEI-related issues people face is implicit bias, recruiting diverse candidates, and understanding other perspectives.

- The Societies were not viewed as providing programs and resources to foster the success of under-represented groups in our membership and sciences (question 7) particularly with younger members/students and those at earlier career stages, and there is still a stated need for more programs and resources to build on the programs and services for under-represented groups in our sciences and Societies (question 12).

- There was no category within the publications/communications, activities/programs, or leadership where there was a majority agreement that the Societies were doing well or very well in reflecting diversity, equity, and inclusion. Leadership areas had much lower response on the well or very well scale than the publications/communications and activities/programs categories.

- For those who have experienced discrimination within the Societies, implicit bias and gender bias were most prevalent.

- There are both proponents and detractors for the DEI initiative within the Societies along with a group that believe there are no DEI-related concerns within the Societies. Another group believes there is more the Societies can and should do to build awareness of DEI and programs. (question 12)

- There is strong support for more action in developing programs to engage under-represented individuals and develop long-term relationships with minority-serving institutions, developing a stronger mentoring program, and providing education and training on DEI-related topics.

- The DEI-related issue of “creating an inclusive workplace” is the top priority for any education and training opportunities the Society would look to develop.

- With the exception of the Women in Science events at the annual meeting, there is an opportunity to build more awareness of DEI-related resources of the Societies.