Report from ASA Recruitment, Retention, and Recognition Task Force

Members: Sharon Clay (Chair), Gary Pierzynski, Susan Chapman (ASA HQ)

Chair of Membership and Meetings subcommittee: Caley Gasch, Assistant Professor, North Dakota State University

Subcommittee members included: Adrienne Blakey, Undergraduate Student, Oklahoma State University; Lee Burras, Professor, Iowa State University; Jodi DeJong-Hughes, Extension Educator, University of Minnesota; Grace Flusche, Graduate Student, Texas Tech;

Chair of Governance and Awards subcommittee: Susan O'Shaughnessy,

Subcommittee members included –Pat Carr, Montana State Univ., Cristie Preston, Maria Villamil, University of Illinois, and Sharon Clay, Distinguished Professor, South Dakota State University

Task force purpose: Evaluate ways to increase and enhance retention of new career members; increase representation of female and new members in active ASA society roles (Board of Directors, Section Chairs, Community Leaders, Committee assignments) and examine recognition of members to determine if an imbalance exists. In addition, the task force was asked to make suggestions to improve retention/imbalances.

The task force was formed with a diversity of experience, career stages (from undergraduate students to those who have served ASA in diverse roles), and from a range of disciplines and employment. Because this is a large undertaking, the full committee was divided into two subcommittees, Membership and Meetings and Governance and Awards.

Data were obtained on a variety of subjects from ASA fellow nominations by gender of nominator and nominee to gender of members and length of ASA membership from staff.

Synopsis. This report is a draft that looks at gender equity in ASA. There are some areas where the disparities are large. Membership data did not support other expected disparities.

- 1) It was found that retention of female is lower starting at about 5 years post-graduate (the 'class' starts as almost 50/50 ratio of male/female but ends up at 75/25 later). We do not know, from the data provided, why membership for female decreases in this period.
- 2) Currently, female are in position to chair communities. In 2018, 32% of the presiding Community Leaders were female, in 2019 that percentage dropped to 28.6%. However, 41.7% of females are in the role of Community Vice-leaders for 2019. However, election to section chairs is lagging. Recent data indicated that typically only 1 section (formerly division) per year (since 2009) was led by a female. This is <15% female representation.
- 3) Female on the task force mentioned that the size of the meetings is somewhat overwhelming. When coming to the meetings as an undergrad or graduate student there is a sense of community due to the camaraderie of other classmates, grad student mentors, and/or other grad students. Perhaps any new attendee, particularly those without a network, feels "lost in the shuffle" of a larger meeting. More data are needed to determine if it is a gender issue, new career issue, or both.

- 4) Females that were part of the task force stated that, from their own experience, they often feel 'unworthy or lack confidence' of taking on leadership roles and/or committee assignments. However, once 'tapped' they feel they gain the confidence and are energized to do the 'next thing'. This may not be a gender issue but may be a general new career issue.
- 5) The surprising statistic is that female fellows have fewer years of service at the time they are chosen as fellows. However, female only make up 26% of the membership due to retention, so since fellows each year make up 0.2% of membership, the number of female (or no woman selected in a given year) may not be viewed as gender bias.
- 6) Because male/female ratio is skewed, to keep a gender non-bias on committees, editorial boards etc. those few females who serve often feel that they are 'superfemale' and asked to do LOTS of things in order to keep gender equality. If retention could be improved, this would be a plus in many ways.

One of the discussions we had was very informative. It was on the way female/male may feel in large groups. Male may have more self-confidence to (for instance) navigate a meeting without community support. Female often want the sense of community and feel more comfortable in smaller groups. One of the strong recommendations of this task force it to strengthen and encourage COMMUNITY ENGAGEMENT. At present, only sections have a set time to meet, these can be overwhelming, the communities were set up to have more engagement with those really interested in those topics. (Some felt that going to email elections for a community was a poor choice as it does not allow for personal contact and discussion. The advantage of having email elections is that it is inclusive of those that cannot attend the meeting). The community election process allows for face-to-face participation, engagement, and allows those who are less self-confident a 'way in' to the 'good old boy' network.

Communities have been in place for about 6 years. Perhaps it is time to do a survey to find out the satisfaction level that the membership feels about communities and if there are ideas about community improvement. One task force member said 'after 20 years of attending the meeting, someone in the community asked me to chair the community. I never thought I had something to say.... But after doing that, I realized I did and could have further leadership roles......' That is a very strong statement of why the community structure should be working within ASA and how to help members become engaged and feel like they have a 'home'.

In addition, strengthening meeting content in the areas of education and outreach, organic agriculture, and interdisciplinary topics (e.g. IPM), where females tend to be more involved, may help in retention as well. Again, this programming effort could (should) be led by communities, as sections are too large and have multiple communities to engage.

In further discussions, it was stated that most current members were NOT involved with ASA as undergraduates. While keeping the undergrad programs, it was discussed that perhaps some of the emphasis should be placed on graduate students. For example, pizza with the presidents and Greenfield Scholar programs, at present, focus on undergrad involvement. Adding grad students, to encourage early career retention, and CCA involvement, may be ways to help transition grad students into early career members.

∕lembership and	l Meetings	Sub-co	ommit	ttee
-----------------	------------	--------	-------	------

Purpose:

Identify reasons for declining membership (poor retention) of females after graduation and in later career stages. Compile ideas for engaging new members and retaining them through their careers.

Why are we losing members?

We do not know, from the data provided, why we are losing female members after graduation, or at later career stages. Possible reasons for this:

- ASA offers a lot of opportunities for students (special programs, scholarships, chances to compete for money, waivers) and membership fees for students are low. After graduation, members may not have the support from their employer to retain membership or travel to meetings. Also, the post-graduation benefits of being a member might not be clear to graduates.
- The goals and content of ASA may not align with career paths. This would presumably result in loss of membership from all genders, but if the meetings and benefits are focused on a narrow sub-set of agronomy interests, membership suffers. ASA is both a professional society, and research society. As such, ASA should provide content for all aspects of agronomy professions (education, research, consulting, etc.). Meetings may be lacking in some of these aspects, in which case many groups will not feel welcome or have a need for ASA.
- ASA is a very large society. Students may attend meetings with cohorts and advisors but may
 lose that network after graduation. If that happens, ASA becomes a scary and intimidating place
 to navigate and become involved in the society.

Suggested solutions for addressing losses in membership:

- Membership non-renewal survey. ASA sends renewal notices to members who have looming membership expirations. Perhaps ASA could create a small, fast survey to inquire why members (especially, grad/early career members) choose not to renew their membership. Even if a fraction of non-renewers responded, it would provide some insight on why members are leaving ASA. Although a survey instrument is in place that asks for reasons for non-renewal, perhaps more effort is needed, beyond the limited-participation non-renewers survey. No matter what, a plan of informed action cannot be undertaken if the underlying reason for the trend is not known.
- ASA should make an effort to clearly communicate the value of being a member after graduation. This might include assessing if membership is meeting the needs of members and if not, identify areas to develop and cultivate retention and involve females. For example, maybe the meetings need more offerings in agronomy education, inter-disciplinary science, or more CCA content. If ASA does not value all areas of the profession, it should revisit its charter.

How can we engage and retain members?

These are some of our recommendations, based on our own experiences, both within ASA and in other societies. In general, we see opportunities for ASA to *actively* be more inclusive of all members, including female members.

The ASA meetings will always be large, but there is a need to create smaller, more welcoming
opportunities where members from all career stages and backgrounds can interact. Breaking
into "the club" is difficult for any member, and it is difficult for a member to transition from a

name on a list to actively being involved, recognized, and valued. Many of the leadership roles within the society cycle through the same sub-networks. ASA should consider actively and aggressively facilitating opportunities for networking and welcoming all members. This will cultivate community and fellowship within the society, which will build value in membership and involvement.

- Mentoring programs: many large societies have successfully built community through their mentoring programs. New members (not only students but early career members) are paired with veteran members, based on similar interests and career goals (questionnaire). The specific goals of the program can be both professional (ie. job searching) and personal (ie. how to be a mom and a scientist). Males can and should also be involved in this program. ASA could sponsor a social event for pairs to meet and mingle. This helps newcomers feel welcome, expand their network, and have access to successful role models in the society. It is also an opportunity for the society to recruit and retain bright minds and support their success. Note: This suggestion may already be acted on at the 2019 meetings as a eMentoring program is planning to be launched by ASA.
- Mid-career and veteran members of ASA have a role to play in engaging and interacting with the new and early career members. One reason why smaller conferences are so important for student members is because they have the opportunities to interact with established, respected, well-known members of the discipline. Achieving that level of interaction is difficult at the ASA meetings, in their current state. The best networking opportunities are smaller gatherings (tours, meals, poster visits) where direct, casual interaction occurs. When veteran members show interest in young minds of the society, members feel welcome and valued and are more likely to find a professional home within the society.
- Opportunities for building a cohort. In addition to the interactions between members of
 different career stages, ASA should support activities and opportunities for students, early
 career members, and members of any under-represented group to build a cohort, which can be
 a source of support at meetings and throughout careers. The student programs do a good job of
 this, and similar programs could be implemented to bring small groups together.
- ASA recruitment and retention efforts are currently, largely focused on student membership retention. While this is important, and there are excellent programs in place to benefit students and those transitioning into their career, we suggest other strategies that resources and efforts be put into recruiting beyond the student demographic. ASA has puts effort into recruiting through CCAs (trial membership), non-member authors, and non-member presenters. However, we suggest other strategies for reaching and recruiting bright minds who are at all career stages and across diverse groups. This may require identifying related societies, organizations, and networks that might serve as a recruitment pool. Some societies provide awards to members who have recruited new members. Many of the student programs may be adapted to include other career-stages, and efforts might address making meetings more accessible to those outside of a traditional academic position, or may develop recruitment campaigns that target specific academic demographics (post-docs, technical/research staff, CCAs, educators). Recruitment needs to move beyond student retention.
- More personal communications via emails from ASA were suggested. Current emails tend to be cumbersome, lack style to capture interest, and are mainly about research and policy. What if a community email is sent periodically that describes what their community is about, what is being planned, and asks people to join? Or an email telling me why it's important to be a member, a few resources, like the mentor program, group projects or committees that need more members.

Governance and Awards subcommittee

The task of this group was to determine areas where there is an imbalance of females in leadership roles or an imbalance in recognizing contributions from female members of ASA, and to make recommendations to the ASA Board on methods to increase female representation and recognition within the Society.

Data from ASA staff member, Susan Chapman, reviewed areas where gender balance may be skewed and females might be under-represented within ASA. The task force used the percentage of female members within ASA either for the current year or for the time frame that is germane for each category of representation (Table 1) as the metric for imbalance. Our examination of the data indicated that females were not well represented in the following areas- nominators, nominees and recipients of ASA Fellow awards; Community Section Leaders; leadership roles in ACSESS journals as editors and in some cases as associate editors.

Table 1. Breakdown of Representation by Gender within Areas of ASA

Category	Current Stats	Metric	Imbalance?/ Discussion
ASA	From 1908 to 2020, 3.5% of	This position	Not in the past 8 years
Presidential	ASA presidents have been	requires lengthy	
Candidates	females. However, in the past	membership to	
	eight years (2011-2019), 57%	understand and	
	of female candidates were	commit to the	
	elected as ASA Presidents.	society, and the role	
		takes time,	
		therefore, it is	
		expected that	
		members established	
		in their careers	
		would commit to	
		such a role. 13.26 %	
		of members serving 16 years + in the	
		society are female.	
ASA Fellow	In 2019, 28.6% of Fellow	Criteria- must be a	Yes; except for 2019, historically a
Recipient	inductees are females, and in	member for at least	limited number of females have been
Recipient	2016, 25% of females were	7 yrs & make a	recognized as Fellows; and very few
	inducted. However, less than	substantial	females are engaged in the nominating
	22% of females were inducted	contribution to the	process for Fellows.
	in all other years since 2009	society	process for renows.
	and no females were inducted	society	Encourage nomination of deserving
	in 2015 and 2018.		members & realize that nominees
			may not be selected the first time. It
	From 2009-2018, on average,	~26% of members	may take multiple years before
	<12% of annual nominees	with 6 to 10 yrs	selection. Improve package
	were female; <7.5% of annual	membership are	submission each year.
	nominators were female.	female.	Subillission Each year.

	Of the Fellow committee members this past year,23% were female and 77% were male.		Encourage selection of an equal number of female and male committee members to limit gender bias.
Category	Current Stats	Metric	Imbalance?
ASA Award Recipients	From 2015 to 2019, Female award recipients represented at minimum 31% of awardees	~26% of members with 6 to 10 yrs membership are female.	No
ASA Section Leaders	Data was only from 1998, 2008, 2013, and 2018: indicated that typically 1 section (formerly division) was led by a female. This is <15% female representation	~26% of members with 6 to 10 yrs membership are female.	Yes
Community Leaders & Vice Leaders	In 2018, 32% of the presiding Community Leaders were female, in 2019 that percentage dropped to 28.6%. However, 41.7% of females are in the role of Community Vice-leaders for 2019.	Of members with 1 to 5 years, 38.5% are female; ~26% of members with 6 to 10 yrs of membership are female.	No
Journal Editor	Of the nine journals, females are absent from the role of editor.	Persons submit their CV and vision to the ASA Board when a call is open.	Not discussed.
Associate Editors (AE) for ASA Journals	62.5% of AEs for the Natural Sciences Education journal are females. The Plant Phenome, Urban Agriculture,	AEs are generally members with >5 years of attendance	There appears to be an imbalance in three of the ASA journals.
	Environmental Quality, and Agricultural and Environmental Letters journals follow with 33.3%, 30.8%, 26.9% and 25% representation of females in the AE role.	~26% of members with 6 to 10 yrs membership are female.	Two of our task force members are Technical Editors and they believe that gender is not considered with the invitation/selection process, rather acquiring well- qualified persons who are willing to volunteer when asked is primary.
	Female AEs in the Agronomy J, Crop, Forage & Turfgrass, and Crops & Soils < 18%.		
Technical Editors for ASA Journals	The Agronomy Journal has equal representation of females and males, the Agricultural and Environmental Letters Journal are represented by 25% females, while the J. of Environmental Quality has 16.7% female technical editors and the Crop, Forage & Turfgrass Management	Not discussed	Not discussed

Journal has no females serving as technical editors.

Category	Current Stats	Metric	Imbalance?/ Discussion
Invited Speakers at Annual Meetings	In 2017, the percent of Section invited female speakers was 100% and 67% in a Special Session and Education and Extension Section, respectively. In all other ASA Sections, the percent of Section invited female speakers was < 22%. The Biometry and Statistical Computing Section did not invite any female speakers. In 2018, a number of Section invited speakers are described as "Unlisted", until this adjective is clarified, it is difficult to represent Section invited female speakers by gender.	Of members with 1 to 5 years, 38.5% are female; ~26% of members with 6 to 10 yrs of membership are female.	Not discussed.

Graphs that summarize the data above are shown in Appendix A.

The imbalance in representation of females in areas within ASA could be due to a number of factors, including the decline in female membership after 5 years; lack of 'involved' participation in ASA due to the great amount of work that females, especially in the university system, are already tasked with in early-to-mid career status; or beliefs that their contributions are not in the same league as Fellow recipients; avoidance of self-promotion, etc. Whatever the cause of the imbalances, the Task Force believes that focusing on encouraging females in ASA to get involved in ASA is important for them and the society. It is also critical that ASA strives to continually recognize contributions from female members to agronomy and related fields and to the Society. Therefore, we recommend establishing a mentoring program for junior female professionals and intentionally promote contributions from females in the field of agronomy or related sciences through CSA news, other media tools and at the Annual Meetings.

- 1. Formulate a mentoring program for junior professionals in science (to include academia, industry and the government) that is similar to the Golden Opportunity Scholars program. The main objectives of the mentoring program would be to:
 - a. provide education and access to experts within the professional society of the mentee's choice for the purpose of enhancing success in scientific competence and leadership skills;
 - b. improve knowledge sharing throughout all levels of the association;

- c. enable female to learn about the structure of ASA, including leadership roles;
- d. engage members throughout all levels of the association;
- e. instill confidence in the mentee;
- f. improve pathways/opportunities for female to participate in leadership roles.
- 2. Increase and sustain recognition of female's accomplishments in agronomy and related agricultural fields by working with the Women in Science Committee to help promote their events at Annual Meetings, articles; and incorporating special editions within CSA News to promote females in ASA (contributions to science, highlight member careers, member contributions to ASA communities, etc.), explore other media tools, and encourage female participation during the Annual Meetings.
- 3. Consider changing the structure of sub-meetings at the annual meetings, i.e. return to the Community Business Meeting format, making sure that females have access to leadership roles at the Community (foundation) level and on up to the Section level.

Appendix A:

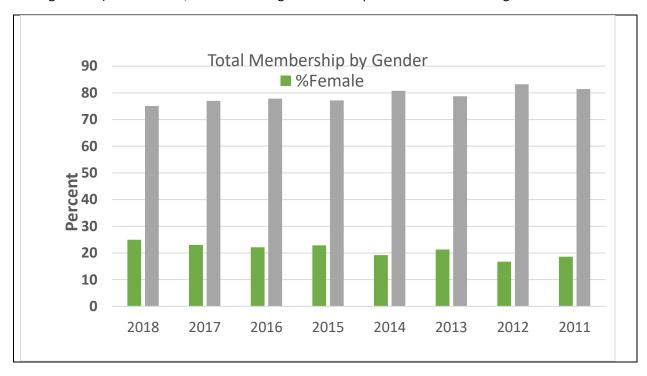
Membership by Gender as a Function of Years:

Members by Gender and Years of Membership				
	Female	Male	Unlisted	Total
1 to 5 Years	1089	1698	44	2831
6 to 10 Years	214	594	6	814
11 to 15 Years	93	374	2	469
16 to 20 Years	61	399	0	460
21 to 25 Years	44	281	0	325
26 to 30 Years	43	306	0	349
31 to 35 Years	30	310	0	340
36 to 40 Years	32	314	0	346
41 to 45 Years	20	236	0	256
46 to 50 Years	2	145	0	147
51 to 55 Years	1	124	0	125
56 to 60 Years	0	78	0	78
61 to 65 Years	0	27	0	27
66 to 70 Years	0	12	0	12
71+ Years	0	2	0	2
Total	1629	4900	52	6581

Female membership declines sharply after 5 years and continues to drop at a similar rate from 6 to 20 years of membership.

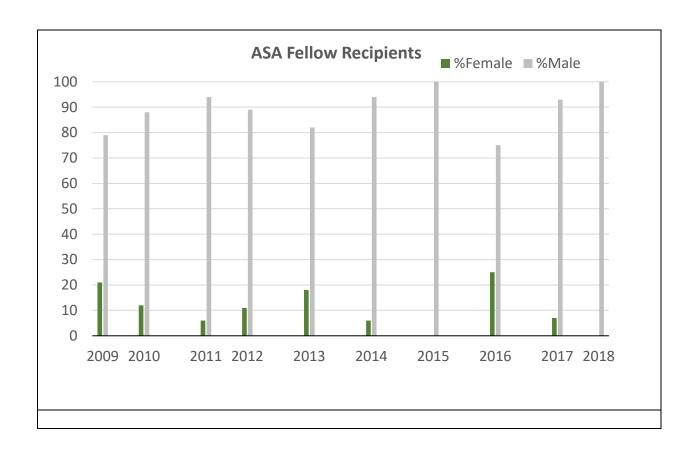
Membership by Gender:

In 2018, 24.95 % of ASA members were female. Female membership has increased slightly since 2014. In 2018, 19.7% of members (excludes corporate, member education, emeritus, graduate and undergraduate) were female, with the average membership from 2011- 2018 being 15.8%.

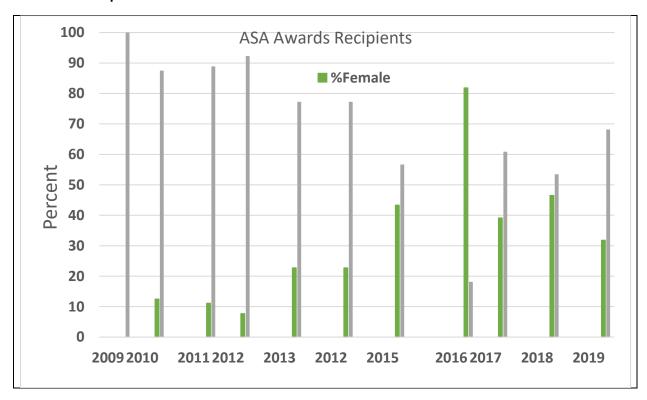


Fellow Nominations and Recipients:

Using data from 2009-2018, the highest percentage of females nominated for Fellow was 22% in 2017. The average percentage of females nominated for this period is 11%. The greatest percentage of female Fellow recipients occurred in 2016 at 25%, followed by 21% and 18% in 2009 and 2013, respectively. Female were nominated in all 10 years, but in 2015 and 2018, there were no female Fellow recipients. For this same period, on average, 5.5% of the nominators were female and 94.5% were male. In 2011 and 2017 the nominators for ASA Fellow awards were 100% male and during these two years, Fellow Awards were received by female scientists.



ASA Award Recipients:



Section and Community Leadership by Gender:

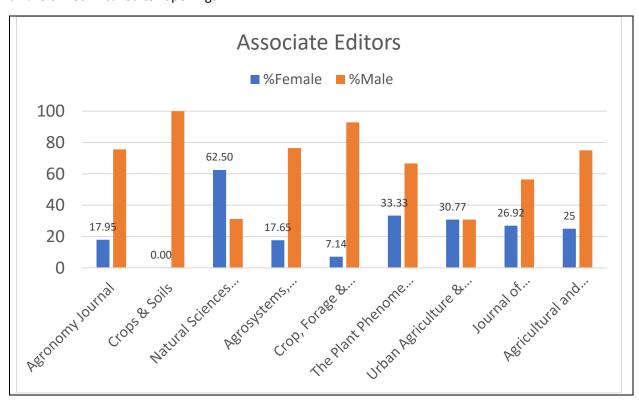
In 2018, 32% of the Presiding Community Leaders were female, in 2019 that percentage dropped to 28.6%. The representation of females in the role of Community Vice-leaders was 37% in 2018, and increased to 41.7% in 2019. This is a positive trend. I recommend that members and the ASA Board recognize this and encourage the Community Vice-Leaders for 2019 to continue to recruit females to participate as Vice-Leaders in 2020.





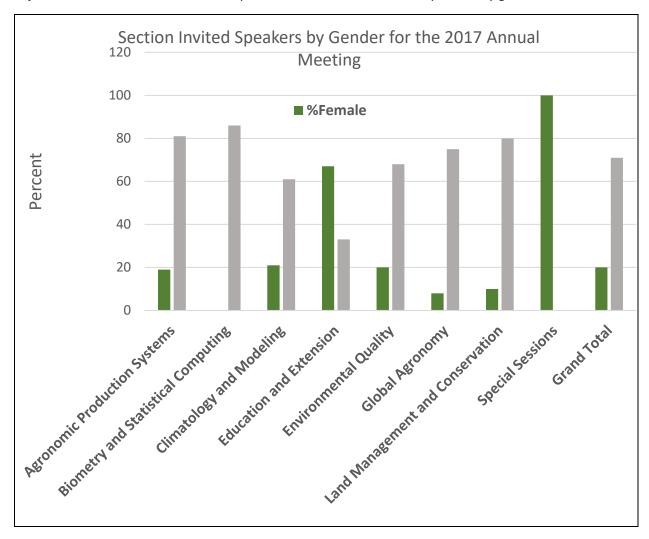
ASA Journals:

Of the nine journals, females are absent from the role of editor. The Crops and Soil journal does not have any female in the role of Associate Editor. However, 62.5% of Associate Editors for the Natural Sciences Education journal are females. The Plant Phenome, Urban Agriculture, Environmental Quality, and Agricultural Environmental Letters journals follow with 33.3%, 30.8%, 26.9% and 25% representation of females in the Associate Editor role. The remaining three have less than 18% of females in the Associate Editor role. For those journals with Technical Editors, the Agronomy Journal has equal representation of female and male personnel, the technical editors for the Agricultural and Environmental Letters Journal are represented with 25% females, while the J. of Environmental Quality has 16.7% female technical editors and the Crop, Forage & Turfgrass Management Journal has no females serving as technical editors. Recommendation: Make sure that Editors and Technical editors are aware of reviewers who are involved and doing excellent reviews so that when opening arise, they are considered, recruited and selected as Associate Editors. As they progress, make sure they are made aware of Technical editor openings.



Invited Speakers:

In 2017, the percent of Section invited female speakers was 100% and 67% in the Special Session and in the Education and Extension Section, respectively. In all other ASA Sections, the percent of Section invited female speakers was < 22%. The Biometry and Statistical Computing Section did not invite any female speakers. In 2018, a number of Section invited speakers are described as "Unlisted", until this adjective is clarified, it is difficult to represent Section invited female speakers by gender.



Electoral Success for ASA President by Gender

Female candidates appearing on the ballot for ASA president from 2011 through 2019 were successfully elected 57% of the time, while male candidates appearing on the ballot for the same position were only successful, 43% of the time.

