

Problems and Progress in TWS Plenary Speakers

DIVERSITY OF SPEAKERS HAS INCREASED, BUT IT STILL LAGS BEHIND

By April A. T. Conkey, Emily Williams, Jesse Alston and Sara H. Schweitzer



Courtesy Carolyn Finney

▲ Storyteller, author and cultural geographer Carolyn Finney, pictured here in a previous appearance, was a plenary speaker at the 2021 virtual TWS Annual Conference, where she spoke on the importance of cultural diversity in conservation.

The Wildlife Society increasingly recognizes the value of diversity among its members. In the field of wildlife ecology and management, students and professionals are more diverse than ever. This is great, because the quality of the wildlife profession and its ability to resolve conservation problems are inseparably linked to the people doing the work. We need all hands on deck to address the complex problems of modern wildlife management.

Wildlife research and management benefit when people come from diverse backgrounds. Wildlife biologists understand the value of biodiversity, which increases ecological function by ensuring that different species using different strategies fill more ecological roles (Naeem et al. 1994). Human diversity serves a similar function in the wildlife profession (Hofstra et al. 2020) and the key to solving hard problems is often the ability to see problems differently (Gino 2018). People from different backgrounds are more likely to contribute different perspectives, have different life experiences and solve problems differently (Friedman et al. 2016, Lu et al. 2017).

The payoff from diversity is enhanced science. Some studies even show that manuscripts from diverse teams are published in journals with higher impact factors and are cited more frequently than articles by homogeneous groups (Campbell et al. 2013, Nielsen et al. 2017). Diversity is not just a tangential byproduct of making wildlife management better. It is vital for achieving it. Furthermore, wildlife management will be strongest when wildlife professionals reflect and represent the public we serve—spanning race, ethnicity, gender identity,

sexual orientation, disabilities, the urban/rural divide, generational divides and nationality, among other axes of diversity.

However, as is the case in other STEM fields (Potvin et al. 2018, Gamage et al. 2021), inequities exist when it comes to representation of marginalized or historically underrepresented groups in leadership positions in the wildlife profession. Who is chosen to lead state and federal wildlife agencies? Who achieves full professorships in university wildlife departments? Who do TWS members elect as their president or hire as their CEO? Who does TWS invite as its keynote and plenary speakers? Such choices seem to reflect the priorities of leaders in the wildlife profession and TWS, and members can feel excluded when wildlifera representing their identities are missing from top positions.

As one measure of TWS' efforts to ensure that members from all axes of identity see role models and leaders in important Society positions, we combed through programs from TWS' annual conferences between 1994 and 2021 to identify invited keynote and plenary speakers. Invited speaking positions are important because such invitations may signal and confer professional accomplishment, respect and approval from TWS as an organization. Although we could not assess speakers on every axis of diversity, we recorded the pronouns they use in public to assess gender diversity.

Women at the podium

Most wildlifera would agree that representation of women in the Society is the axis of diversity on which TWS has made the most progress over the past few decades, and we would expect an increase in women keynote speakers over time. We split the speakers into two groups: invited speakers as a whole and invited speakers who are wildlife biologists. (Because titles of presentations were not always provided, we use this as a proxy for whether women speakers were invited to speak about their professional accomplishments in biology, as



opposed to being invited to speak about diversity, equity and inclusion in the profession.)

We found women's representation among invited keynote and plenary speakers at TWS conferences has increased. From 1994–2021, there were 160 invited speakers. Of that group, 125 (or 78.1%) of invited speakers were men and only 35 (21.9%) were women. Among the 134 speakers who were biologists, 107 (79.9%) were men and 27 (20.1%) were women. Since 1994, to our knowledge, no person who identifies publicly as noncisgender has ever delivered a plenary or keynote presentation at a TWS conference (cisgender describes a person whose gender identity aligns with their birth/genetic sex).

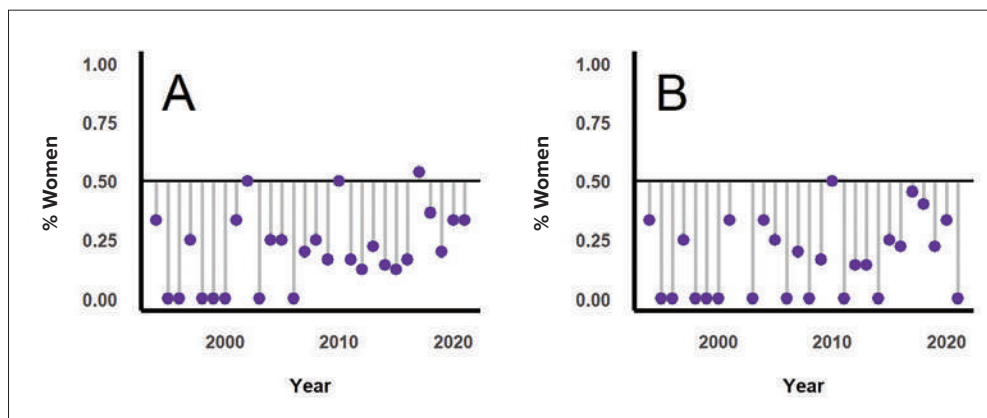
From 1994–2006 (roughly the first half of our data), plenary and keynote speakers in seven out of 13 annual conferences included no women at all. At 11 annual conferences, no women wildlife biologists provided invited keynote or plenary presentations specifically about their scientific expertise. In only three out of 28 years—2002, 2010 and 2017—women comprised at least 50% of invited keynote or plenary speakers and their numbers never exceeded 54%. In only one year—2010—women made up 50% of the invited speakers who were biologists. Even among women biologists, several were invited as keynote speakers specifically to speak about diversity, equity and inclusion in the profession, which does not showcase their professional accomplishments in wildlife biology (although they may have also presented their science in oral or poster sessions).

But there has been progress. The proportion of women invited speakers at annual conferences has risen consistently over the past decade. Over the past five years, 15 out of 40 plenary and keynote speakers (37.5%) were women, nearly double the overall average (although this proportion is lower for speakers who are biologists). In addition, each conference since 2006 has had women plenary or keynote speakers. These data reveal real progress, and we acknowledge the contributions of the many TWS members and support networks like Women of Wildlife that have worked hard to increase representation.

Next steps

Nevertheless, TWS must continue to build momentum in showcasing diverse leaders as speakers. Because gender representation among invited speakers is skewed, we also think it is likely that underrepresentation among other axes of diversity is occurring, and it is likely compounded across the spectrum of diversity—female or LGBTQ+ people of color, for example.

The Wildlife Society has not collected demographic information on conference speakers, so progress among other axes of diversity is impossible to quantify without querying each invited speaker or making assumptions about speaker identities. Anecdotally, we think plenary and keynote speakers at even the most recent TWS conferences do not reflect the full diversity of the membership or the public we serve.



Credit: April A. T. Conkey, Emily Williams, Jesse Alston and Sara H. Schweitzer

However, the 2022 TWS conference called for workshop, symposia and panel discussion proposals to be “multifaceted with topics and speakers representing diverse perspectives of our communities” and required a statement on efforts toward diversity, equity, inclusion and accessibility. We hope that this same directive is applied to keynote and plenary speaker selection processes and that transparency in the process can increase. Other efforts include the updated 2020 [TWS Standing Position Statement on Workforce Diversity within the Wildlife Profession](#) and 2021 [Diversity, Equity and Inclusion Vision](#) document. Both are important steps, as a “visible statement of equity” was found to be a key positive factor for increased representation of women in leadership positions on boards of zoology-focused professional societies (Potvin et al. 2018).

▲ The representation of women among invited keynote and plenary speakers at TWS annual conferences is improving, but it rarely approaches 50%. Panel A represents the proportion of women invited as keynote and plenary speakers overall. Panel B represents the share of women among those who spoke as wildlife biologists.



► Wini Kessler delivers the 2018 Aldo Leopold Memorial Award keynote presentation. Over the past five years, 15 out of 40 plenary and keynote speakers at TWS' Annual Conferences were women.



Credit: The Wildlife Society

Although we think it is likely that TWS will naturally experience continued improvement in addressing these issues, it is important to expedite this process. For example, there are several actions that TWS—from its CEO down to its grassroots membership—could take to increase representation among TWS invited speakers, including using existing frameworks by the [National Institutes of Health](#) and others ([Klein et al. 2017](#), [Leibnitz et al. 2022](#), [Potvin et al. 2018](#), [Segarra et al. 2020](#)).

Change starts by leading, and diverse conference organizing committees result in more diverse keynote speakers ([Klein et al. 2017](#)). Training workshops on developing and giving invited presentations and panel discussions could facilitate committee involvement from a wider group of members. The Wildlife Society could develop internal lists of prominent scholars similar to [DiversifyEEB](#) to help guide nominations for speaking invitations and solicit nominations directly from members or even from the public. The working groups and committees tasked with inviting speakers can use best practices to collect and analyze demographic information on speakers to ensure that the most obvious problems with underrepresentation no longer occur at TWS conferences. They can also recognize that while plenary and keynote presentations on diversity, equity and inclusion are valuable for the Society, these talks are no substitute for inviting wildlife biologists from marginalized groups to present in science- and policy-focused sessions. To help improve the leadership pipeline, a diverse cohort of wildlifera could be recruited for TWS' Leadership Institute each year. Finally, chapters and sections,

which serve as a feeder system for The Wildlife Society, can undertake a similar examination of representation at their annual conferences and in mentor and leadership programs.

We used gender expression as an illustrative example, but the wildlife profession will be strongest when an increasingly diverse array of wildlifera are more clearly represented in TWS leadership and among the invited speakers we choose to honor at our annual conferences. Society-wide underrepresentation is not an easy problem to solve nor will solving it be quick. However, a welcoming and diverse Society will lead to members from all groups being more active in our organization and seeking leadership positions ([Leibnitz et al. 2022](#), [Lupon et al. 2021](#), [Potvin et al. 2018](#), [Sardelis et al. 2017](#), [Tulloch 2020](#)).

We are encouraged by TWS' recent progress, and we thank the many members, staff and Council representatives who are working to make the society more diverse, equitable and inclusive. We can, must and will continue to do better. The wildlife profession depends on it. ■

This article arose from conversations within TWS' IDEA Working Group. Kelley Wood-Mundy contributed to the data collection. All authors contributed equally to this article.



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