

Commentary

The changing face of the wildlife profession: tools for creating women leaders

WENDY S. ANDERSON, USDA-APHIS-Wildlife Services, 2150 Centre Ave., Building B, Mail Stop: 3W9, Ft. Collins, CO 80526, USA Wendy.anderson@usda.gov

Abstract: Women continue to be underrepresented in the natural resource sciences arena, including the field of wildlife biology. The gender gap widens further with advancement to higher level positions. This paper explores potential reasons behind the lack of women in leadership and the array of challenges that women may face in their career paths. A variety of tools are proposed to support and encourage career advancement for women. Studies show that organizations with higher numbers of women in leadership roles perform better and diverse teams are more dedicated and committed to the mission. Understanding gender issues and generating organizational change is necessary to not only achieve an inclusive and diverse workforce, but one that is more creative and productive. The purpose of this paper is to help mitigate gender bias in the natural resource sciences profession and provide recommendations for transforming the workplace environment.

Key words: communication, discrimination, gender, glass ceiling, leadership, mentoring, natural resources, wildlife profession, women, workplace

WOMEN HISTORICALLY have been underrepresented in the Science, Technology, Engineering, and Math (STEM) professions, including the life sciences field (Dingell and Maloney 2002, Institute of Medicine 2007, U.S. Office of Personnel Management 2010, Kern et al. 2015, Noonan 2017), which includes natural resources and wildlife biology. While more women than ever are obtaining degrees and finding entry-level positions in STEM, women remain underrepresented and underutilized (Dingell and Maloney 2002, Institute of Medicine 2007, Noonan 2017). For instance, between 1937 and 2006, out of 11,363 journal articles published by The Wildlife Society (TWS), the international professional society for wildlife biologists, women have been the sole authors on only 163 and a first author on only 1,059 of those articles. It was not until the 1980s that contributions by women increased above 10% (Nicholson et al. 2008). Furthermore, as of 2015, women accounted for half of the college-educated workforce overall but constituted only 28% of employees in science and engineering occupations (U.S. Office of Personnel Management 2010, Kern et al. 2015, Noonan 2017).

At every step up the career ladder, the gap

continues to widen and the representation of women further declines (McKinsey & Company and LeanIn.org 2017). Surveys and data show that as career/grade levels increase, the percentage of women in higher-level positions decreases (Dingell and Maloney 2002, U.S. Office of Personnel Management 2010). Women comprise 34% of natural resource managers, 26% of all science and engineering managers, and only 18.6% of top-level managers, executives, and administrators in all fields (Dingell and Maloney 2002, U.S. Office of Personnel Management 2010). According to a 2015 survey of the U.S. Department of Agriculture's Forest Service, women scientists comprise 41% of the positions at "junior level" grades 11/12 and only 22% of "senior level" grades 13 and higher (Kern et al. 2015). Additionally, Swihart et al. (2016) found that of 437 wildlife and fisheries faculty from 33 research-intensive universities in the United States, women were more likely to hold assistant professor positions (30%) than men (18%). In contrast, only 29% of women faculty were full professors compared to 51% of men. The record numbers of women in the workforce is not matched by their presence in higher-level, more influential and economically advantageous, positions (Dingell and Maloney 2002).

Studies show that the leadership advancement problem is exacerbated because women tend to receive less support and fewer opportunities to develop their confidence, interests, and abilities throughout their careers than men (Angus 1995, Institute of Medicine 2007). Women in wildlife and fisheries organizations also perceive they are underutilized in their positions and that the workplace environment does not allow them to fully participate in administration and management (Angus 1995). A study by Angus (1995) found that the 3 most significant unmet needs for women employed by fish and wildlife agencies were: (1) opportunities for career development, (2) lack of a strong female network, and (3) flexible working hours. These deficiencies accumulate throughout women's careers and become more pronounced with fewer women entering senior-level positions (Angus 1995, Eagly and Carli 2007, Institute of Medicine 2007).

This phenomenon has become recognized as the glass ceiling. However, Eagly and Carli (2007) point out that this metaphor implies that women and men have equal access to entry- and mid-level positions and that the barrier only exists at the highest levels in organizations. They argue that the glass ceiling metaphor fails to incorporate the complexity and variety of challenges that women may face in their leadership journeys and a better metaphor to account for the sum of obstacles confronting women is a labyrinth. Women are not turned away only as they reach the top phases of a career, but disappear in various numbers at several stages (Eagly and Carli 2007). Women of color face even greater barriers to success, receive much less support, and face considerably higher declines at senior levels (Institute of Medicine 2007, McFayden 2015). While workplace racial disparities are not discussed further here, it is an equally important issue that warrants mentioning.

For the United States to continue to strengthen its scientific leadership amidst increasing globalization, it must develop all of its potential leaders—men and women (Institute of Medicine 2007). Understanding gender differences and inspiring organizational change is necessary to not only achieve an inclusive and diverse workforce, but one that is more creative and productive (Sandberg 2013, Annis and Nesbitt

2017, McKinsey & Company and LeanIn.org 2017). Organizations with higher numbers of women in leadership roles perform better, and employees on diverse and inclusive teams work harder, stay longer, and are more dedicated and committed to the mission (Sandberg 2013, Annis and Nesbitt 2017, McKinsey & Company and LeanIn.org 2017). Tightening the gender gap and creating diversity at the top is vital for programs to excel. Women must be challenged to accept greater leadership roles and become more involved. The community of wildlife professionals will become stronger as diversity is encouraged (Nicholson et al. 2008).

This paper explores potential reasons behind the lack of women in leadership and the array of challenges that women may face in their career paths. A variety of tools are then proposed to support and encourage career advancement for women. The purpose of this paper is to help mitigate gender bias in the natural resource sciences profession and provide recommendations for transforming the workplace environment.

Issues in historically male-majority professions

Gender differences

Not every person fits into every stereotype or specific framework, and we all can point to exceptions. Speaking in broad generalities on gender, however, surveys and research show that men and women think and problem-solve differently in the workplace (Lindsey 2015, McFayden 2015, Fang 2018). The causes of gender differences are not universally agreed upon, as we know through the nature versus nurture debate. Whether biological factors or social conventions regarding expected roles and behavior (Eagly and Carli 2007, Lindsey 2015), or a bit of both, influence variations, we can probably agree that differences do exist.

Studies have shown that, in general, men may view the workplace in hierarchies (chain of command) with respect and value placed on authority, while women may focus more on relationships and attempt to create a level playing field where everyone has an opportunity to be heard, regardless of position (McFayden 2015, Fang 2018). Men may be inclined to care more about the end goal, while women find the process involved in reaching

that goal equally important. Men tend to be more fact-based, while women may be more intuitive and empathetic (McFayden 2015, Fang 2018). Men tend to sort internally through options before offering solutions, whereas women prefer to explore externally, seek engagement, and first discuss options with others (McFayden 2015, Fang 2018). On team projects with an established lead, men may be more comfortable supporting the leader by working on the specific task provided to them, while women may be more willing to work collaboratively and assist wherever needed (Eagly and Carli 2007, McFayden 2015, Fang 2018). Because of this, however, women are often assigned the more service-related roles such as advising or setting up meetings, which leaves little time for duties that help build a portfolio of scientific research, grantsmanship, publishing, or fulfilling other performance metrics that increase opportunities for promotion. During conflict, men may depersonalize, externalize, hide emotions, and contemplate solutions in solitude, while women may personalize the issue, show emotion, and talk through the problem to reach understanding. When attributing success, men may focus inward on their own skills and hard work, while women focus outward and acknowledge the team's efforts (McFayden 2015, Fang 2018). These generalizations, of course, are not universally true for all men and women, but are helpful to inform the discussion of how to optimize everyone's contribution to an organization's success.

Ideally, gender differences can be used to leverage one another's strengths on work teams (McFayden 2015, Fang 2018). Women's communication and interpersonal styles bring value to the natural resources field, especially from the human dimensions aspect. Women do not need to compromise their natural tendencies to succeed (Springer 2004, Eagly and Carli 2007, Fang 2018) in a male-majority workplace. When we encourage women to lead with their strengths and inspire men to embrace diverse views, we take advantage of gender differences and create healthier, stronger organizations (Kern et al. 2015).

Implicit biases

Both men and women of all races practice pervasive explicit and implicit gender bias in

the workplace (Institute of Medicine 2006, 2007). Bias, whether obvious or unspoken, has played a major role in limiting women's opportunities and careers (Institute of Medicine 2006, 2007). Most men and women carry prejudices, of which they are unaware, that play a major role in evaluating people and their work performance (Eagly and Carli 2007, Institute of Medicine 2007). On average, even if they believe they are being objective and fair, both men and women are still less likely to hire a woman than a man with identical qualifications, are less likely to give credit to a woman than a man for identical accomplishments, and will habitually give the benefit of doubt to a man, rather than to a woman, when information is limited (Eagly and Carli 2007, Institute of Medicine 2007, Gaines 2017). An organization's built-in cultural bias influences all employees' experiences and can create a less inclusive work environment for women. Rules that appear neutral and fair may actually function in a way that leads to differential treatment or outcomes for men and women (Institute of Medicine 2007). One strategy for removing gender bias from organizational "plumbing" and transforming the culture is for women to be visible role models for all employees (Institute of Medicine 2007, Annis and Nesbitt 2017). Agency leaders and managers must ensure women are involved in every aspect of the work, from succession planning and interview panels to mentoring and decision-making (Annis and Nesbitt 2017).

Workplace harassment

Unfortunately, studies continue to show that despite significant energy and funding invested in efforts to attract and retain women in STEM fields, harassment and bullying restricts women's participation in career pathways in college and in the work environment (National Academies of Sciences, Engineering, and Medicine [NASEM] 2018). When women choose to proceed along the career path, their contributions and advancement can be limited as a consequence of harassment (i.e., sexual harassment or gender discrimination; the indirect, yet pervasive, culture of harassment within the organization in general; or the retaliation and isolation experienced by women after formally reporting it; NASEM 2018).

An organization's climate is the most

compelling predictor of gender discrimination (the most common form of sexual harassment; NASEM 2018). The organization's tolerance for harassment or bullying, as perceived by employees, serves as an indicator. Examples suggesting a discriminatory climate include the perception that the misconduct is supported and protected, investigations are unfair or untimely, or reprimands are minor in comparison to the abuse (NASEM 2018). Other factors that facilitate creation of gender discrimination include a hierarchical structure with dependencies on those at higher levels, symbolic compliance with policies and procedures on harassment that are ineffective in preventing the misconduct, leadership that is disinterested in taking aggressive measures, and work settings where 1 gender has the power and influence over decisions (Gaines 2017, NASEM 2018). Because men hold most leadership positions in the natural resources field, they have the potential to significantly influence positive change and challenge traditions or historical norms (TWS 2018). However, we all have an obligation to continue progress toward an inclusive, welcoming, and safe environment for every employee (TWS 2018).

Leaders can change the organizational climate by demonstrating how seriously they take the issue of harassment and that they are listening to those who speak up to report it (NASEM 2018). Organizations that are able to move beyond "compliance on paper," align policies and practices to truly address culture and climate, and improve transparency and accountability can achieve positive change (NASEM 2018). Organizations that attain strong and diverse leadership, measure progress, incentivize change, provide support and an opportunity to voice concerns without retaliation, and aim to create diverse, inclusive, and respectful environments where issues of harassment are addressed fairly and quickly are more successful (NASEM 2018).

What managers can do to help women succeed

Whether perceived or recognized, obstacles for women in achieving career goals often include family obligations (such as child care and consideration of a spouse's career goals), lack of women mentors or support networks,

gender bias, stereotypes, double standards, barriers preventing access to opportunities and promotions, and bullying or harassment. To influence change and close the gender gap, these obstacles must be discussed, understood, and opposed (Angus 1995, Institute of Medicine 2006, Sandberg 2013, Gaines 2017, McFayden 2015, Fang 2018, NASEM 2018). Managers and supervisors can help women succeed by advocating for opportunities and offering various tools for support and development (Suedkamp Wells et al. 2005, Institute of Medicine 2006, Eagly and Carli 2007, Institute of Medicine 2007, Sandberg 2013, McKinsey & Company and LeanIn.org 2017, NASEM 2018, TWS 2018):

- Encourage formal mentoring programs, involvement in professional societies, and informal interactions through networking and building support communities. Employees with both mentors and protégés, along with support networks, are more likely to excel. Being engaged in mentorship and having role models can have a tremendous impact on professional development.
- Use formal mentoring as a tool to increase recruitment and retention. Mentoring provides an opportunity to transfer cultural and organizational knowledge to developing professionals.
- Provide support, advice, guidance, increased motivation, and career development.
- Inspire everyone to ask thought-provoking questions in a safe environment.
- Ensure credit is given at work where credit is due and find ways to acknowledge those contributions.
- Encourage staff to take challenging assignments that help them grow professionally and motivate them when they claim they are not ready or qualified for a new opportunity.
- Try to avoid having a sole woman member of any team, as this can increase marginalization.
- Ensure all employees receive proper technical and safety training, including self-defense types of training for working alone in the field.

- Inform all employees that family-friendly and work–life balance approaches and policies are supported.
 - Acknowledge family obligations to help dispel possible barriers to advancement (i.e., pregnancies, maternity/paternity leave, child care, the necessity of managing responsibilities within dual-income partnerships, and the difficulty in having to choose between spouses' competing careers, especially when relocation is required).
 - Restructure hiring and promotion procedures to reduce bias and encourage diversity.
 - Use open recruitment tools rather than relying on informal social networks and referrals to fill positions.
 - Work with the organization's leaders to review and revise merit-based systems and performance plans to remove subjectivity and hidden bias (disproportionate weighting of qualities, styles, or processes).
 - Create a cultural shift in which all interests are considered and supported and events are inclusive rather than exclusive.
 - Proactively influence work dynamics through thoughtful scheduling, team building, and training efforts to increase awareness and change attitudes.
 - Clearly understand the pertinent laws and policies surrounding harassment and bullying, take complaints seriously, listen carefully when concerns are shared, and take decisive action that holds offenders accountable while also protecting the target.
 - Make all staff responsible for reducing and preventing harassment and address issues fairly and quickly.
 - Acknowledge the differences between men and women and allow time for these differences to be expressed in meetings, discussions, and during decision-making processes.
- these strategies, all with a foundation in communication (Suedkamp Wells et al. 2005, Institute of Medicine 2006, Eagly and Carli 2007, Sandberg 2013, Annis and Nesbitt 2017, Fang 2018):
- Engage in professional mentoring relationships at all levels of the career ladder—as a protégé, mentor, and/or as a peer mentor to a group. The benefits of being a mentor include personal satisfaction, social change, building professional capital, career enhancement, and resource development. The value of being a protégé includes both career and social benefits. Women gain from strong and supportive mentoring relationships and connections with powerful networks.
 - Create a network, both within the organization and externally, for social support and camaraderie. Make time to attend networking opportunities and socials outside of work hours or after conference sessions. They are important and are often where decisions are made. Work with supervisors and coworkers to make sure the venue or activity is inclusive and comfortable for all.
 - Build community by joining organizations and professional societies.
 - Provide support, inspiration, and empowerment to others, which in turn increases your own support network and builds confidence.
 - Enhance flexibility to achieve a work–life balance. Achieving a balance has actually been shown to increase productivity and retention.
 - Ask questions, think outside your comfort zone, and try everything. Do not be afraid to learn new skills.
 - Learn how to use your knowledge in the sciences effectively, while also working in the public arena. Communication and interpersonal skills are paramount. Ask for training and assignments to improve writing, listening, and oral presentation skills, along with methods for working with people of different values, conflict resolution, and achieving political awareness.
 - Remember that it is okay to say no sometimes. Push back when time is too

What women can do for themselves

Communication is the most effective tool for success and career advancement. Consider

limited to take on a new project.

- Advocate for yourself by being vocal about which projects you want and asking for challenging job assignments.
- Utilize resources and capitalize on training programs that increase skills. Do not be afraid to ask for additional training.
- Play to your strengths even when they are stereotypes (i.e., emotional aptitude, active listening, and empathy—skills that may be in short supply in mostly male settings).

Seemingly, the majority of women who have persevered in male-dominated fields have high levels of confidence and self-efficacy, possibly because they have to be strong, fearless, and dedicated to what they believe in to push organizational barriers. Pioneering women, those among the first hired or who are the only women on staff, can face social isolation and extreme visibility (Institute of Medicine 2006). Dr. Mamie Parker, a woman pioneer in conservation and the first African American appointed to the Senior Executive Service to serve as assistant director of the U.S. Fish and Wildlife Service, has stated that being a pioneer is lonesome. However, she offers that women need not give up being their own self: “You don’t have to be one of the boys to be an outdoorswoman, wear your lipstick. You don’t have to fit a model to fit in. You get respect being the person you are. Be yourself and be it well” (Springer 2004).

What everyone can do for each other

We can all help each other by acknowledging that gender differences exist in the workplace and that these differences actually help to increase innovation, creativity, performance, and dedication to the mission. This starts with communicating as effectively as possible by allowing others the opportunity to be heard and reminding ourselves to consider different interests and opinions. Aspire to create diverse, inclusive, and respectful environments. These minor changes can help to facilitate an organizational culture and climate shift. A diverse and inclusive workplace will be better equipped to effectively manage our natural resources. In the words of Jane Goodall, “What you do makes a difference, and you have to

decide what kind of difference you want to make.” We all have the power to be the face of inspiration and change.

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Associate Editor: S. Nicole Frey

WENDY S. ANDERSON is a TWS-certified wildlife biologist with the Wildlife Services program in the U.S. Department of Agriculture's Animal and Plant Health Inspection Service, where she currently works as policy and science advisor for the Office of the Deputy Administrator. She has worked for Wildlife Services for 22 years in various locations and positions, including field wildlife biologist in Arizona, environmental coordinator in North Carolina, state director in New Jersey, and assistant National Feral Swine Program manager in Colorado. She is originally from Alaska and received a B.S. degree in wildlife biology/natural resource sciences from Washington State University and a Master of Public Administration degree from Troy University.

