A Multigenerational Perspective on Overcoming Challenges in Protected Area Research and Management

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Introduction

A career that revolves around the science and management of protected areas is replete with challenges, many of which will not lessen in the coming years. As multigenerational life members of the George Wright Society (GWS) we have experienced an array of challenges that have tested our resolve, and consequently strengthened our commitment to understanding, engaging with, and contributing to protected area communities. This essay is a reflection on our experiences handling the challenges that have confronted us throughout our careers, particularly during times of political adversity. We first describe several strategies that we have employed during challenging periods, and techniques that other GWS members may find useful in developing personal resiliency. Next, we share our perspectives on the meanings of the GWS, particularly the role that the professional society has played in shaping our personal and professional lives. The GWS runs through the DNA of our family and is a critically important community that we will continue to support in the coming years. We close this essay with several observations and thoughts about how the GWS might better

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position itself in the future and continue to foster excellence in parks, protected areas and cultural sites across the globe.

Strategies for overcoming adversity

Grow and foster social networks while not excluding key voices. Our first strategy for overcoming adversity is focused on building social networks that define your professional home and identity. The GWS publications and meetings are important venues for each of us to establish a personal support base by bringing together those who have similar goals and ideas on how best to manage and conserve resources. These support systems will provide guidance throughout your career. However, social networks need to have permeable boundaries and be open to welcoming other people who can add unexpected benefits, provided that this process does not compromise your own well-being. Reaching across boundaries will create a stronger and more robust foundation for science and management of protected areas, especially given today's political climate that divides communities and strategically pits them against one another. We live in a highly polarized time in which some people discard scientific information out-of-hand and do not consider other viewpoints simply because they belong to "the other side" (Gifford 2011). The psychological barriers that impede environmental behavior are problematic for many reasons, especially because there is potential for social learning, innovation, and creativity when people from diverse worldviews come together to discuss common interests. To overcome these obstacles, you should not only strengthen your relationships with colleagues, but also be inclusive of other people with diverse worldviews.

Do good science, with a particular emphasis on science communication. We have found that one of the most effective strategies for weathering difficult periods is to just keep your head down (but eyes up) and continue doing good science and management. Despite changing political tides, it is crucially important to focus on conducting sound research and making informed decisions. Make sure that your ideas are theoretically grounded and techniques are scientifically defensible, and that the decision-making process engages multiple disciplines across the social and natural sciences. As articulated during a panel discussion that we had the pleasure of co-organizing during the 2011 GWS conference (van Riper et al. 2012), science for parks and protected areas must not only be interdisciplinary but also integrated with resource management agencies and communicated to broad audiences. There is a crucial need for incorporating scientific information into public understandings of nature (Mooney and Kirshenbaum 2010). By prioritizing science communication you can help ensure that lay audiences recognize scientific advancements, form accurate beliefs about environmental challenges such as climate variability, and support federal research funding. Although the science–society divide might seem insurmountable due to lack of support for evidence-based decisions in political administrations, remember that changing policies is like steering a large ocean liner. When someone new comes into the pilot house and turns the wheel, at first the ship essentially stays moving forward in the same direction. Only after some time has passed will the ship's course be appreciably changed in a new direction (Osterblom et al. 2017).

Maintain a long-term perspective on ecosystems and human behavior change. The final strategy that we have found to be useful for overcoming challenges is to recognize that we

all must work together over extended periods to achieve our goals and sustain research and monitoring in protected areas. Many ecosystems are typified by slow responses interrupted by periodic bouts of dramatic change (Gould and Eldredge 1977), and, similarly, human values and ethics evolve over the course of generations (Dietz 2015). Although longitudinal research has its challenges, undertaking it will generate important, stable information about trends and changes that would otherwise go unnoticed. There is a strong need for research and policy programs to focus on longer-term impacts and reflect the complexity of social–ecological systems in nature-based contexts (Miller et al. 2017). That is, you will be more likely to achieve adaptive management in the face of uncertainty when you produce scientific evidence that shows changing conditions, alongside public involvement in decisions built on trust, equality, and sustained relationships with local communities.

The meaning of the George Wright Society

The GWS is at the heart of our professional identities and has been instrumental in shaping our lives. We have derived great inspiration from other GWS members and become part of what feels like a local protected area movement that addresses globally relevant problems. The lead author recalls giving her first scientific presentation as an undergraduate student at the 2007 conference in St. Paul, Minnesota, where her father (i.e., the present co-author) and future M.S. advisor, Bob Manning, were in the audience. She could not have been more nervous! Despite this internal pressure, she was welcomed by the community and realized that she had found an academic home. At this same conference, she was fortunate to see her father receive the GWS Natural Resource Achievement Award (see Figure 1). Since then, she has continued to share results from her research in the environmental social sciences at

Figure 1. The co-authors at the 2007 GWS conference in St. Paul, Minnesota.

Figure 2. The GWS Board of Directors, staff, and Parks Canada personnel at a meeting hosted by that agency in Ottawa.

GWS conferences, and had the honor of serving as the graduate student representative to the GWS Board of Directors (see Figure 2, above). Relatedly, the second author has been attending GWS conferences and presenting his scientific research from the biological sciences since 1980 at the inception of GWS by Ted Sudia and Bob Linn in the basement of the Department of the Interior building. These starting points provided a basis for us to share our ideas in *The George Wright Forum* and engage with programs such as Park Break, which stimulated personal growth and knowledge of park units. These cumulative experiences have taught us about trends and current issues facing protected areas, instilled an appreciation for encouraging diversity and engaging future generations, enabled us to establish relationships that continue to support our programs of research, and most importantly transferred multigenerational values for nature conservation and scientific inquiry that define our lives.

The future of the George Wright Society

The GWS is the premier organization that connects people, places, and knowledge about protected areas; its future matters. We believe there are several strategies that can be adopted to sustain the organization in the coming years. First, the GWS conferences must continue because they enable interpersonal communication that becomes the lifeblood of the organization. Conferences can also provide economic stability and growth. Secondly, the Society should consider supporting a model whereby a board of directors works closely with annual hosts that volunteer to organize meetings. These meetings could be held on university campuses or at other more affordable venues, and be accompanied by higher registration fees that align with those of typical academic conferences. If financial stability is reached, a long-term goal could be an endowment that will have sufficient funds to carry the Society over in financially challenging periods. Finally, the GWS should consider how best to re-

flect the interests in its constituency, including those of managers and scientists. The loss of many National Park Service biologists during the National Biological Survey era changed the composition of scientists working in the parks, and more recent limits on travel of federal employees have affected meeting attendance. We hope that a balance can be struck among multiple perspectives represented in the organization, and that engagement with the Society will ultimately reflect the broader population of people who have (or should be) engaged with protected areas across the globe. Irrespective of these changing conditions, it is imperative that we continue to facilitate interactions between scientists of all types and managers of parks and protected areas.

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