Title: Academic-rural conservation partnerships could advance bipartisan U.S. climate policy

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Target audience: We are especially targeting conservation academics who study or work in the U.S.; however, we believe this discussion is also of broad interest to conservation scientists, policymakers, and practitioners in the U.S. and globally.

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Abstract

Entrenched political partisanship in the United States has placed long-standing constraints on conservation policy and climate change legislation. These barriers persist, demanding fresh insights into the ways that conservation has become a victim of political polarization, and pathways for encouraging bipartisan support for climate change and other U.S. conservation policies. We suggest three opportunities to build bipartisan support for climate policies via partnerships between rural communities and conservation academics. Specifically, we suggest that conservation academics: (i) emphasize knowledge co-production and partnerships that resonate with rural lifestyles and values; (ii) recruit and train rural students in conservation science degree programs; and (iii) reshape academic advancement criteria to promote rural engagement. We suggest that investments in academic - rural collaboration hold potential to build knowledge, trust, and inclusive consensus on bipartisan climate policy action in the United States.

I. Introduction

In the face of sweeping threats to United Nations Sustainable Development Goals due to climate change, the Intergovernmental Panel on Climate Change has called for swift, integrated action on climate resilience supported by national governments (IPCC 2022). In the United States, almost two-thirds of people think the government should do more to combat climate change (Pew 2020). Moreover, most Republicans and Democrats in the United States believe in climate change (Van Boven, Ehret, and Sherman 2018). Public support for climate action and the urgent environmental moment provide a window of opportunity to pass bipartisan U.S. climate legislation that would secure net zero U.S. emissions by 2050 (Biden Plan 2021). Achieving this aim would also align the U.S. with major efforts by other countries in the Paris Agreement and help restore U.S. credibility and climate leadership in the global arena (Hultman & Gross, 2021). Numerous co-benefits accompany climate change mitigation, including biodiversity conservation, sustainable development opportunities for disempowered communities, and public land and water conservation (IPCC 2022).

However, in recent years partisan divides have deepened in the United States (Pew 2020), and Congress is more polarized than it has been in 50 years (Pew 2022). While major climate funding was passed along party lines via budget reconciliation in 2022 (H.R.5376 - Inflation Reduction Act of 2022), there has been limited progress on bipartisan U.S. environmental policy since 1980 (Turner & Isenberg 2018). Moreover, environmental protection ebbs and flows as presidential administrations and legislative

bodies swing between party agendas. In the long-term, barriers to funding implementation, special interest group influence, remaining gaps in U.S. commitments to achieve net-zero emissions, and the specter of legislative rollbacks to existing climate policy all point toward the need for lasting, bipartisan U.S. climate policy. While some of the impasse on environmental policy is due to issue polarization, i.e. differing perspectives on appropriate policy prescriptions, political psychology shows that much of it also stems from social polarization, i.e. polarization based on group identity (Mason 2015). In fact, people from opposing parties reactively devalue policy proposals from the other party while supporting proposals from their own party, for policies associated with both conservative (e.g. revenue-neutral carbon pricing) and liberal (e.g. cap and trade) principles (Van Boven et al. 2018).

The partisanship that impedes climate policy conversations in Washington, D.C. traces its roots through decades-old contestations of values between local constituents and "mainstream" conservation organizations. In the United States, these arenas have perhaps most famously unfolded in the rural West, which has a particularly acute history of "untold stories of those left out of dominant historical narratives" (Martin et al. 2019). For example, for many rural farmers, ranchers, and landowners in the Western U.S., the Endangered Species Act of 1973 became a mechanism for exclusion from decision-making on their own lands, and the most salient symbol of federal government overreach. Differing values have led to tensions over conservation between independent, place-based ranchers and outside NGO and government representatives in Montana's Eastern Front (Yung, Freimand, and Belsky 2003). In the coalition-building that has been attempted in the U.S. West, some coalitions have bridged differences in environmental values, while others—strikingly—have not, despite highly similar views on environmental policy (Robbins 2006). As Robbins (2006) notes: "Environmentalists and hunters may tell similar stories about nature, but they tell different stories about themselves and about one another, which together with their respective changing political/economic fortunes, make coalitions more difficult. They are each not just the authors of complex stories, but also…the product of those stories."

The causes of environmental partisanship are complex, with many institutional actors influencing the current impasse on climate policy in the United States (Turner & Isenberg 2018; Franta 2021). However, as part of a "boundary science", conservation scientists serve at one important knowledge-action interface, liaising between science production and decision-making (Cook, Mascia, Schwartz, Possingham, and Fuller 2013). In this role, then, conservation academics also stand at the interface of the partisan divides that separate hunters and environmentalists, rural and urban residents, and

Republicans and Democrats. Insofar as we accept this responsibility, we too then are both author and product of partisan political divides - or bridges. At this critical juncture in U.S. and global environmental history, we see an opportunity for our community of conservation academics to invest in our capacity for contributing to a broader, bipartisan climate policy coalition. As researchers, teachers, and ambassadors to the public, we inform policy, inspire young scientists, clarify issues to a broad audience, and co-produce new approaches to climate action with local stakeholders. Given partisan divides on climate change that threaten the environment for generations to come, we believe that the importance of these roles is particularly acute with respect to Rural America. Toward this goal, we advocate for three steps that we can make in academic conservation science: (i) emphasizing knowledge co-production through partnerships that resonate with rural lifestyles and values; (ii) proactively recruiting and training rural students in conservation science degree programs; and (iii) reshaping academic advancement criteria to incentivize rural engagement.

II. Pathways for conservation academics to invest in rural partnerships

Emphasizing knowledge co-production and partnerships that resonate with rural lifestyles and values

Trust-building between scientists and local communities can be facilitated by genuine academic-community partnerships (Adams et al. 2014). Relationships that depend on reciprocity and mutual accountability are primary ways to rebuild this trust and thereby generate broader public support for climate policy. These relationships will grow with proximity (Fig. 1). Face-to-face engagement allows an irreplaceable cultural cache to be built between researchers and stakeholders, and helps researchers develop a more intimate knowledge of the socio-cultural realities of a study context or constituency (Roux, Rogers, Biggs, Ashton, and Sergeant 2006). Rural communities often bear disproportionate burdens on the front lines of environmental issues, such as climate change-related natural disasters and water pollution (Bonnie, Diamond, and Rowe 2020). Rural community members are also critically important stewards of U.S. landscapes, as tribal representatives, farmers, ranchers, hunters, and conservation managers. As such, there is a powerful opportunity for academics to help integrate local climate change impacts with climate action narratives that resonate locally. This work will bear witness to the considerable common ground that exists between rural stakeholders and conservation academics who agree on environmental stewardship but can be separated by politicization and mistrust of government (Bonnie et al. 2020).

Collaborations between academics and local communities provide an opportunity for researchers to learn about the priorities of rural communities while supporting local initiatives and leadership (Bonnie et al. 2020; Rodrigues & Shepherd 2022; Smith, Verísimmo, Leader-Williams, Cowling, and Knight 2009). Over time, these collaborations may extend beyond pragmatic partnerships to reform the value orientations, skills, and knowledge sets of all parties. Moreover, climate action proposals that incorporate local values and livelihoods garner greater support than those that do not (Diamond, Bonnie, and Rowe 2021). Most Republicans and most Democrats believe in climate change (Van Boven et al. 2018), but climate policy solutions do not always reflect local needs and values (Kythreotis et al. 2019). Through academic-rural partnerships, local needs and values can be more authentically reflected in proposed policies (Bonnie et al. 2020). Other possible avenues for renewed academic-public partnerships could include collaborations with religious organizations on stewardship of the earth through climate action, something for which religious scientists are particularly well-positioned (Hanes 2014). Moreover, thoughtful alignment of climate messaging with religious language and values can help foster a bi-partisan agenda (Wardekker, Petersen, and van der Sluijs 2009). Additionally, hiring local community members as part of academic-rural initiatives could build relationships and trust through increased presence in local communities, as has been shown with community-based conservation NGOs (e.g. Mishra, Young, Fiechter, Rutherford, and Redpath 2017).

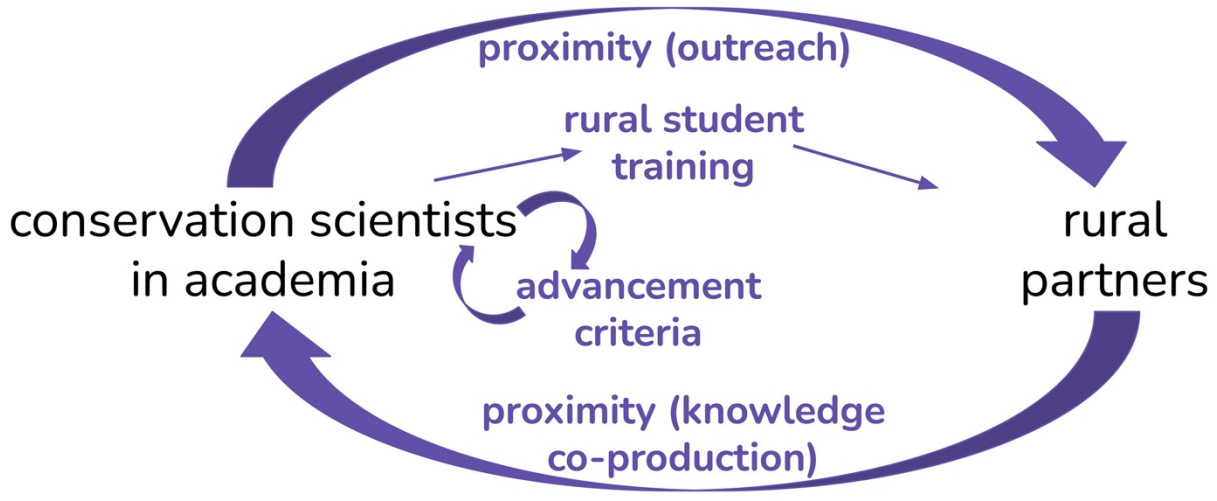

Figure 1. Recommended pathways for academic-rural engagement: emphasizing knowledge co-production through partnerships that resonate with rural lifestyles and values, proactively recruiting and training rural students in conservation science degree programs, and reshaping academic advancement criteria to incentivize rural engagement.

Recruiting and training rural students in conservation science degree programs

Recruiting rural students is a promising pathway for strengthened relationships between rural and university communities. Rural students are less likely than non-rural students to attend college, four-year institutions, selective schools, and universities that confer graduate degrees (Koricich, Chen, and Hughes 2018). We advocate for more intentional recruitment of rural students to undergraduate, graduate, and faculty opportunities in conservation. Academia is making historic strides on diversity, equity, and inclusion for other underrepresented groups (Schell et al. 2020; Smith-Doerr, Alegrio, and Saccio 2017), as shown by powerful calls for diversity recently within academic science, e.g. #BlackintheIvory (Davis 2020; Subbaraman, Davis, and Woods 2020). Complementing these historic milestones, we have an opportunity to increase representation still further by recruiting students from rural backgrounds in conservation science. This form of inclusion could help integrate rural stakeholders into the sprawling knowledge infrastructure beneath climate policy (Scoville et al. 2021), and thereby bring new interests and normative frameworks into value-based positions on climate (Sarewitz 2004).

Greater inclusion of rural students in graduate and undergraduate conservation programs could offer several benefits for advancing climate policy. First, rural students could help create new links between national climate action and local issues in rural communities, such as agricultural interests (Diamond et al. 2021). Moreover, rural students could be new messengers for climate policies in their communities, situating climate science within socio-culturally contextualized ethics (Van Houtan 2006). In order to inspire lasting support for conservation issues, scientific arguments should be expressed within communally accepted ethical frameworks and existing social traditions (Van Houtan 2006). Rural voters often have sophisticated environmental views, but disagree with some environmental policies due to low trust of the federal government (Bonnie et al. 2020) or an absence of place-based values relevant to their lives and livelihoods (Diamond et al. 2021; O'Neill, Holland, and Light 2007; Yung et al. 2003). Rural students, then, could be a critical link between academic and rural communities that help build trust, increase attention to local issues, embody rural values, and communicate climate science in locally relevant ways.

Reshaping academic advancement criteria to promote rural engagement

Another major step forward for academic-rural ties would be a re-orientation of the incentive structures and norms of academia to more fully include and value public engagement (Alperin et al. 2019). For the academic conservation science community to be more committed to creative forms of public

engagement, the value of service must be grounded in tangible structures and incentives, especially through greater weight in academic advancement review processes.

A new faculty model in service of these goals should reframe the standards of scholarship and advancement. For example, Creativity Contracts are an approach to help encourage faculty pursuit of a wider variety of academic activities through custom-designed, malleable roles (Boyer 1990). One study showed that 75% of governing boards, 70% of Deans, 67% of provosts, 71% full-time non-tenure track faculty, and 50% of tenure-track faculty found this idea attractive (Kezar, Maxey, and Holcombe 2015). For example, through Creativity Contracts, participation at a rural stakeholder workshop could carry similar weight as a presentation at an academic conference. Similarly, an influential op-ed on stakeholder needs in a regionally significant newspaper could be valued comparably to a published comment in an academic journal. To bring about this change, institutional support for public outreach must increase, aligning tangible practice with widespread acknowledgement of the importance of outreach (Doberneck 2016; Rose, Markowitz, and Brossard 2020). Indeed, some universities—including some land-grant institutions—have strayed from earlier roles as reliable partners for local stakeholders such as farmers and union workers (Jamieson 2020). While this important work continues through extension offices and NGOs, academia as a whole has lost touch with a public outreach imperative (Kezar 2018). Through the creation of new institutional mechanisms to broaden and customize creative rural engagement, we contend that conservation academics can find touchpoints to broaden and deepen academic engagement with the public on conservation policy issues.

What can outreach by conservation academics to rural publics look like? A few ideas, some of which we have implemented ourselves, include workshops, public lectures and town halls, novel conference structures, op-eds in newspapers, podcasts, museum exhibits, collaborations with religious groups, participation on local or regional boards, and art shows (Table 1). While these ideas are not new and are currently put in practice to some degree (particularly by the important work of extension specialists, NGOs, government agencies, and science communicators), they are rarely a focus in advancement deliberations (Kezar 2018). We call for a radical embrace of proximity, i.e. “presence” (Mishra et al. 2017), by conservation academics to rural stakeholders. At present, the conventions of our discipline are often self-defeating and pull us away from the very constituents we seek to serve, learn from, and engage. As the criteria by which academic careers are judged, academic advancement standards should reflect rather than undermine the priorities and values of conservation science. Moreover, there is a

growing understanding that academics at universities are situated as a critical, but by no means exclusive, part of a broader knowledge ecosystem that includes practitioners, corporations, policy experts, social media, and the general public (Bjarnason & Coldstream 2003; Kwayu, Abubakre, and Lal 2021; Sandmann, Saltmarsh, and O'Meara 2008). With these realities in mind, conservation academics have a major role to play in cultivating trust and relationships with rural communities; however, more flexible incentive structures are imperative for this vision to be adequately supported and normalized.

Table 1. Recommended pathways for academic-rural engagement, with examples.

1. Emphasizing knowledge co-production and partnerships that resonate with rural lifestyles and values
Ex. 1. Prioritize research integrating local economic considerations into alternative energy production.
Ex. 2. Establish fora with Native American communities that center tribal needs in climate policy.
Ex. 3. Partner with churches to co-produce new, religious framing of climate action.
2. Recruiting and training rural students in conservation science degree programs
Ex. 1. Recruit rural students to do graduate work on an ecosystem / production landscape near their home.
Ex. 2. Support rural students in serving as climate messengers to their communities.
Ex. 3. Recognize that undergraduate and graduate rural students contribute to an inclusive academic community.
3. Reshaping academic advancement criteria to promote rural engagement
Ex. 1. Promote 'Creativity Contracts' that allow for flexible approaches to scholarship.
Ex. 2. Reward public outreach and climate communication (e.g. op-eds, collaborations with artists) in tenure cases.
Ex. 3. Restore the university as an invaluable advocate for rural stakeholders.

III. Conclusion

As conservation scientists in academia, we have a powerful opportunity to build bridges between the public, academia, and the conservation policy arena in the United States. Most U.S. voters want stronger environmental protections, and bipartisan consensus on climate policy is possible. However, the aversion of many rural constituents to environmental legislation, including climate policy, shows we must do more to build solutions that emphasize our shared values (Bonnie et al. 2020; Diamond et al. 2021). Through co-producing knowledge, recruiting rural students to conservation science programs, and increasing the flexibility of academic advancement standards, conservation academics can partner with rural communities to reshape the narratives and political support that undergird climate policy. Climate policy breakthroughs are desperately needed and will only truly be secured when constituents across the political spectrum trust one another enough to find common ground.

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