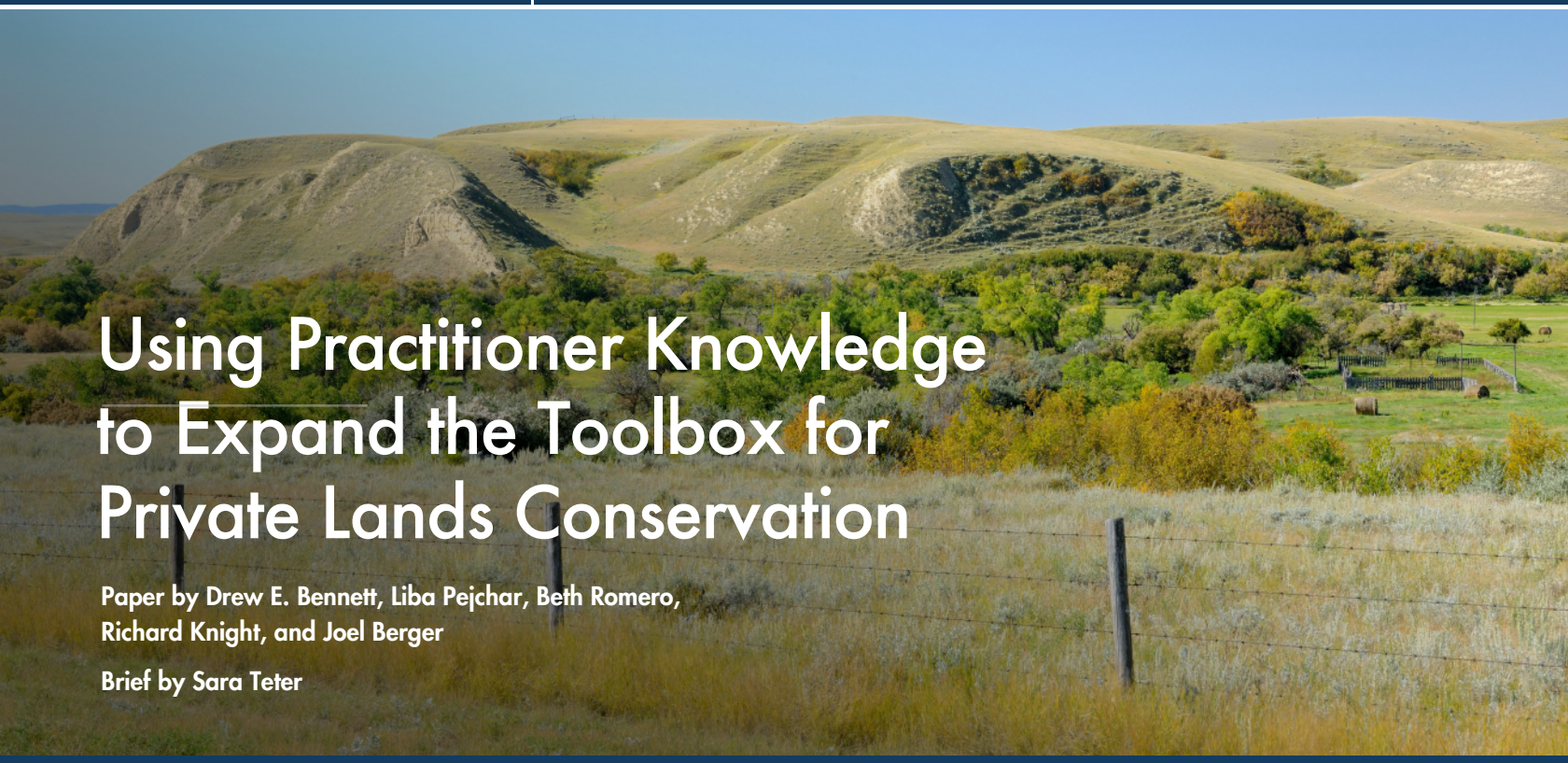
UW Haub School of Environment and Natural Resources

RESEARCH BRIEF
SUMMARY OF FACULTY SCHOLARSHIP



Using Practitioner Knowledge to Expand the Toolbox for Private Lands Conservation

Paper by Drew E. Bennett, Liba Pejchar, Beth Romero, Richard Knight, and Joel Berger

Brief by Sara Teter

Why this study was needed

Conservation efforts on private lands need to address several social and ecological challenges, ranging from limiting residential development and maintaining economic viability for landowners to controlling invasive species and mitigating the effects of climate change.

Achieving conservation goals on private lands requires a portfolio of conservation strategies and a skilled workforce with the knowledge and skills necessary to implement these strategies.

This study assesses conservationists' familiarity with seven strategies (see table). While not an exhaustive list, these strategies are a sampling of the tools that can address diverse conservation challenges and achieve conservation goals. This study seeks to identify knowledge gaps to inform practitioner outreach and education. In the absence of empirical studies of these conservation tools, this study will also provide expert opinion on how well these tools work.

How it was done

Using an online national survey, the researchers gathered responses from 331 conservation practitioners directly engaged in private land conservation. The survey gauged practitioner's familiarity with the seven tools, asking participants to identify which tools they had experience using. Researchers asked those who were familiar with a tool to rate how effectively the tool met certain conservation challenges, and how well suited the tools were in urban, exurban, and rural landscapes.

What they found

Of the seven strategies in the conservation toolbox, practitioners were by far the most familiar with conservation easements followed by direct payment programs. The practitioner's overreliance on these two tools could limit their ability to respond to conservation challenges on private lands.

Participants' insight helped address a lack of research on the outcomes of common conservation strategies. Researchers found that practitioners perceived some conservation tools to be more effective in addressing certain challenges and better suited to certain landscapes than others. Conservation developments were perceived as the only effective tool for urban areas but not effective in rural areas. These expert perceptions provide new understanding about which tools are most effective in certain areas.

Practitioner Understanding of Conservation Tools

CONSERVATION TOOL	DEFINITION	MOST EFFECTIVE AT ADDRESSING	BEST LANDSCAPE CONTEXTS	PRACTITIONER FAMILIARITY
Conservation easements	A voluntary, legally binding agreement between a landowner and a conservation organization or government agency that limits uses of the land to achieve conservation goals.	Limiting development; keeping land in the family	Exurban; rural	
Direct payment programs	A tool in which cash payment or another incentive is provided to landowners in exchange for a conservation outcome or land-use practice likely to produce an outcome.	Restoring ecological processes; maintaining economic viability; restoring degraded habitat; controlling invasive species	Exurban; rural	
Conservation developments	Projects that combine residential developments with conservation goals, such as setting aside a portion of the developed property as a conservation area.	Limiting development	Urban; exurban	
Habitat exchanges/species banking	An arrangement where landowners create, maintain, or improve habitat to earn credits that are purchased by another entity to mitigate impact to habitat on another property.	Restoring ecological processes, restoring degraded habitat	Rural	
Forest/rangeland carbon offsets	Projects that increase carbon sequestration or prevent emissions through changes in forest or rangeland management by a landowner to offset emissions produced by another entity.	Mitigating climate change through climate sequestration; increasing resilience of ecosystems to climate change	Rural	
Grassbanking	A tool where forage (i.e. grass) on one property is exchanged for conservation benefits on a neighboring property.	Restoring ecological processes; maintaining economic viability; restoring degraded habitat	Rural	
Pop-up habitats	Landowners are paid to implement a short-term but high impact conservation practice (e.g. flooding fields during a critical bird migration period).	Restoring ecological processes; maintaining economic viability	Rural	

Why it's important

Limited practitioner knowledge on the range of conservation tools raises concerns about practitioner's ability to meet varied conservation goals and adapt to social and ecological challenges on private lands. Conservation easements, the most widely used of the tools, are effective at addressing some challenges but also have limitations. Practitioners need a diverse portfolio of strategies, and the knowledge and skills to implement them, to remain resilient in the face of changing political and ecological landscapes. This research helps identify gaps and opportunities to further educate and build capacity of conservation practitioners. By establishing practitioner perceptions of the effectiveness of conservation tools, this study provides a much-needed foundation for future research into conservation outcomes.

About the researchers

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Read the paper

Drew Bennett, Liba Pejchar, Beth Romero, Richard Knight, and Joel Berger, "Using practitioner knowledge to expand the toolbox for private lands conservation," *Biological Conservation* 227 (2018) 152-159

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