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Introduction

- Since the *Journal of Range Management* premiered in 1948, range science has made substantial progress on understanding ecological dynamics of rangeland systems and the management practices that sustain them, and these findings have been systematically reviewed and synthesized in various venues (e.g. Briske 2009). As natural resource science has evolved to consider social-ecological systems (Charnley et al., 2017), range social science has gained momentum. Given this rapid and recent development, the range social science literature should be systematically reviewed and synthesized to identify research needs, highlight gaps in theoretical and methodological frames, and advance the range social science research agenda.
- We present a systematic review protocol and preliminary review findings of North American rangeland social science. Our overarching goal is to present the state of rangeland social science and to highlight key research needs and identify theoretical and methodological gaps.

Research Questions

Primary Research Question

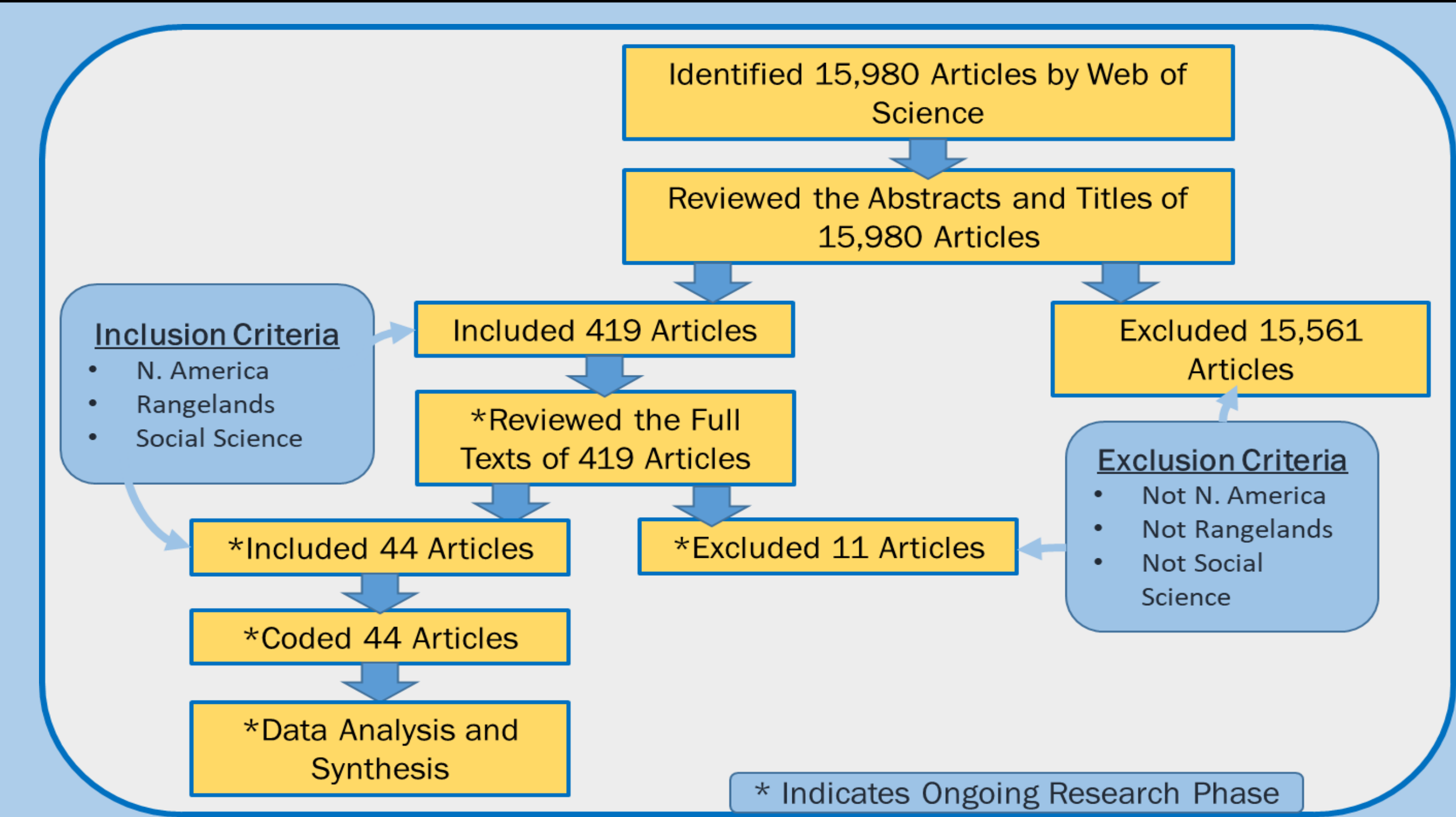
- What is the state of social science research related to North American rangelands, including individual rancher/manager decisions, collaborative rangeland management, and public perceptions of rangelands/range management?

Sub-questions

- How has the range science literature evolved over time?
- What are the major journals for rangeland social science?
- What theoretical frames, methods, and disciplines are used in rangeland social science?
- Geographically, where has rangeland social science been done in North America?

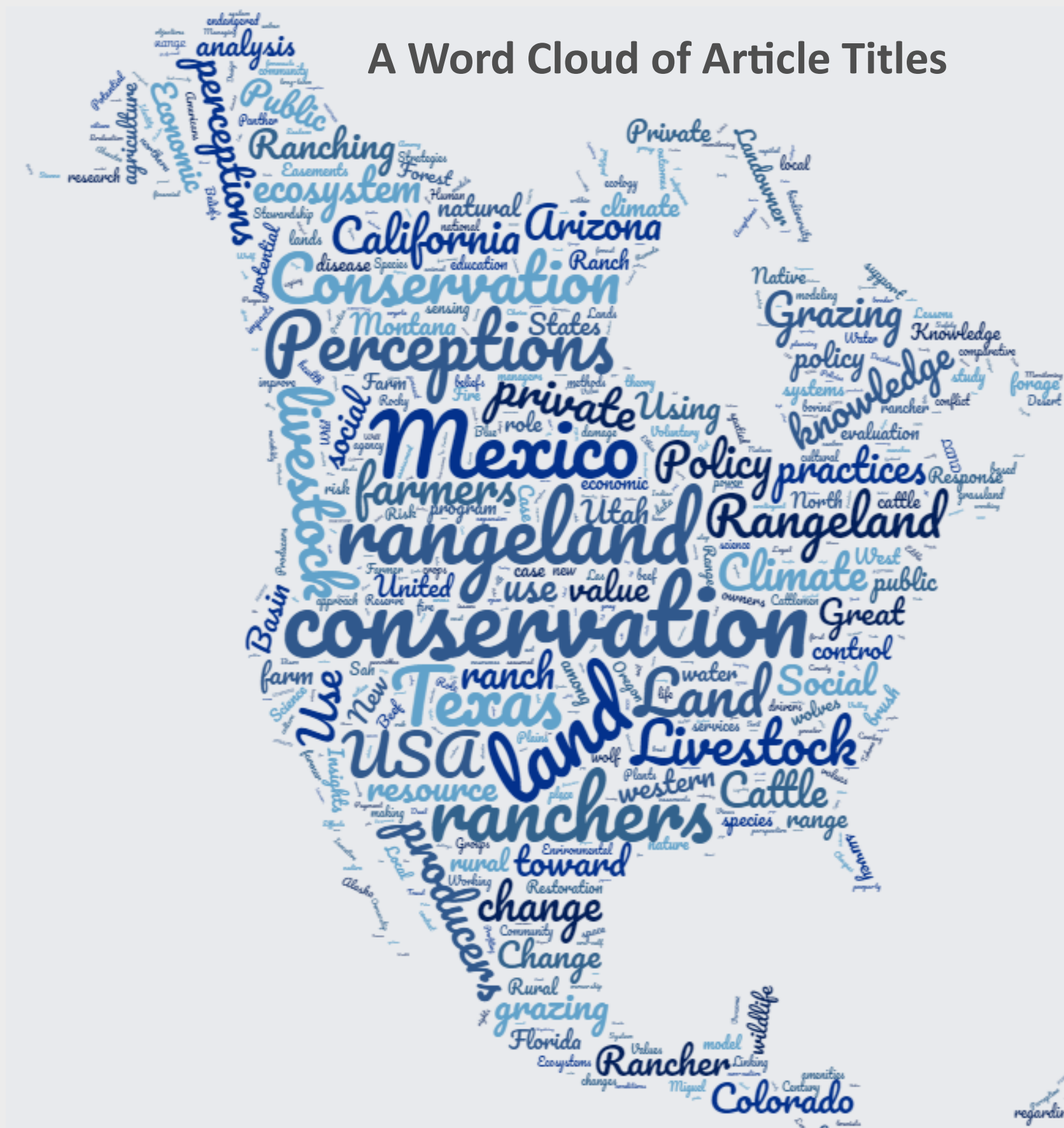
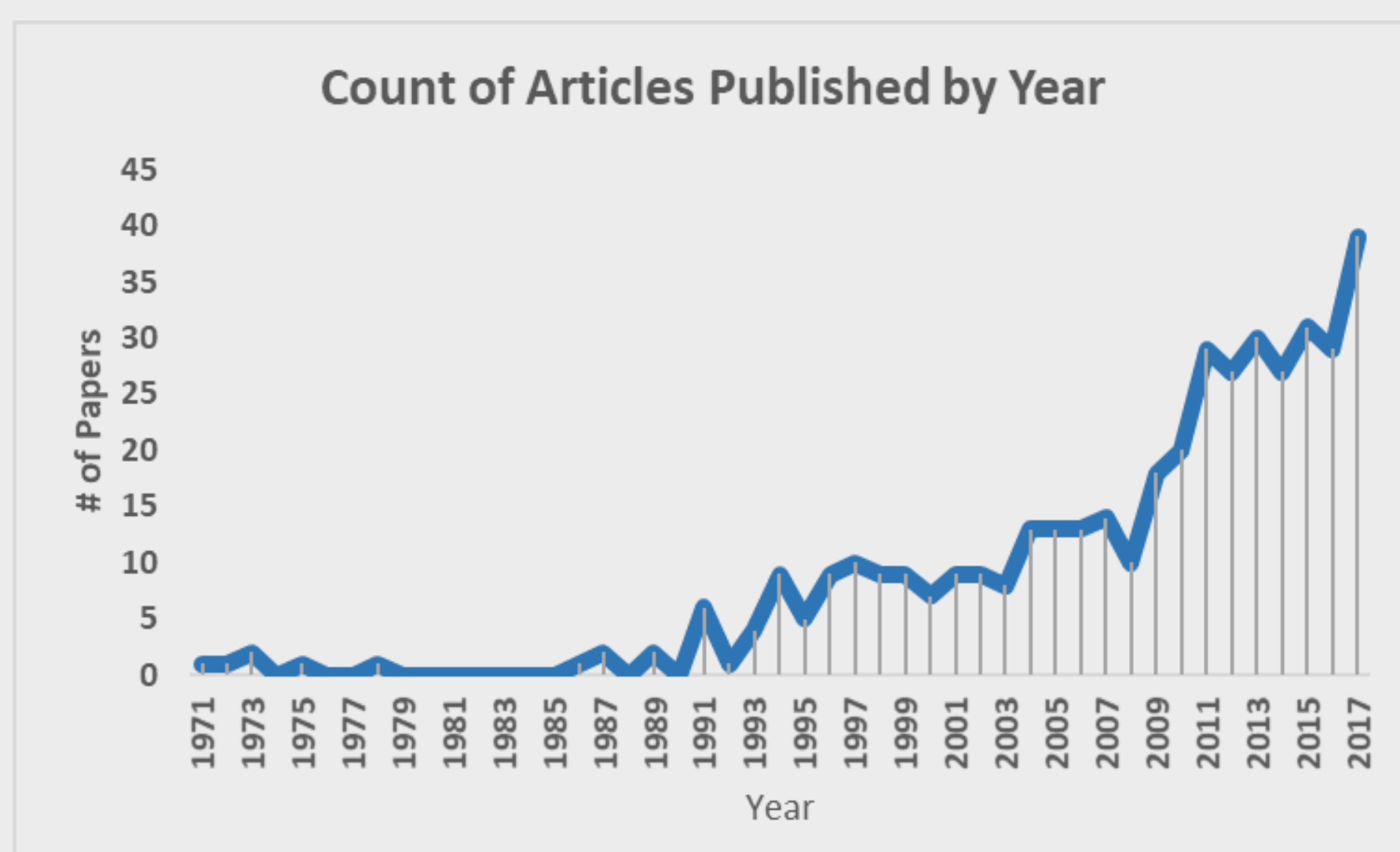
Methods

- We are conducting the review in four phases following the recommendations of Pullin and Stewart (2006):
 - Keyword Search & Abstract/Title Review**– Search Web of Science for articles published from 1970–2017 using all permutations of 12 search terms relevant to rangelands and social science. The search was limited to English and Spanish. In parallel, we screened titles and abstracts of 15,980 articles for inclusion/exclusion based on defined criteria.
 - Full Text Review**– Conduct a full text review of the full set of articles (n=419) included from the abstract and title review. Any excluded articles are reviewed by a minimum of 2 researchers.
 - Data Collection**– Code all articles included after a full-text review. Data are coded into a Google Form. To date, 44 articles are coded.
 - Analysis & Synthesis**– Analyze the data and present a state of the evidence of rangeland social science. The preliminary descriptive statistics and figures were generated using R and excel.

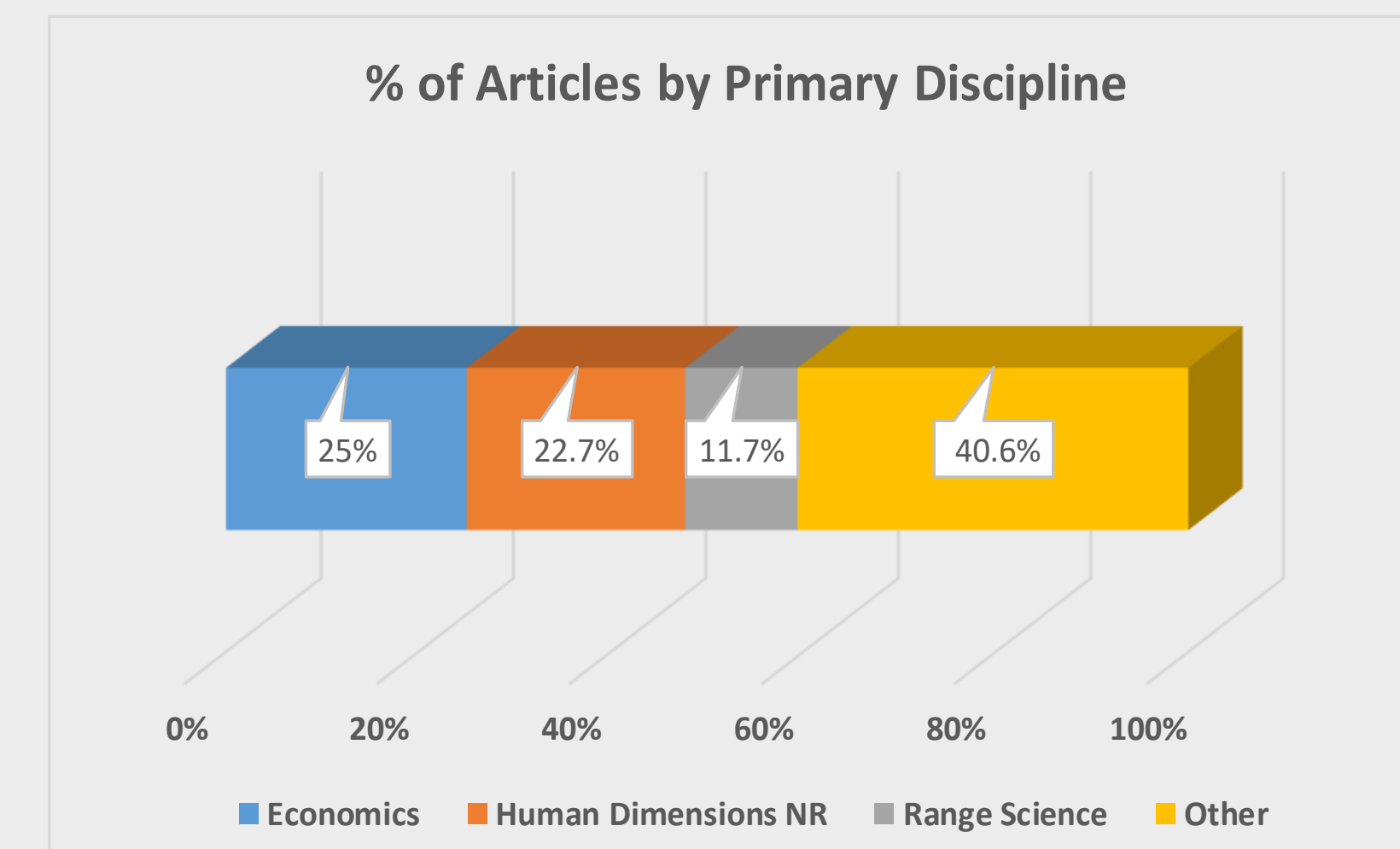
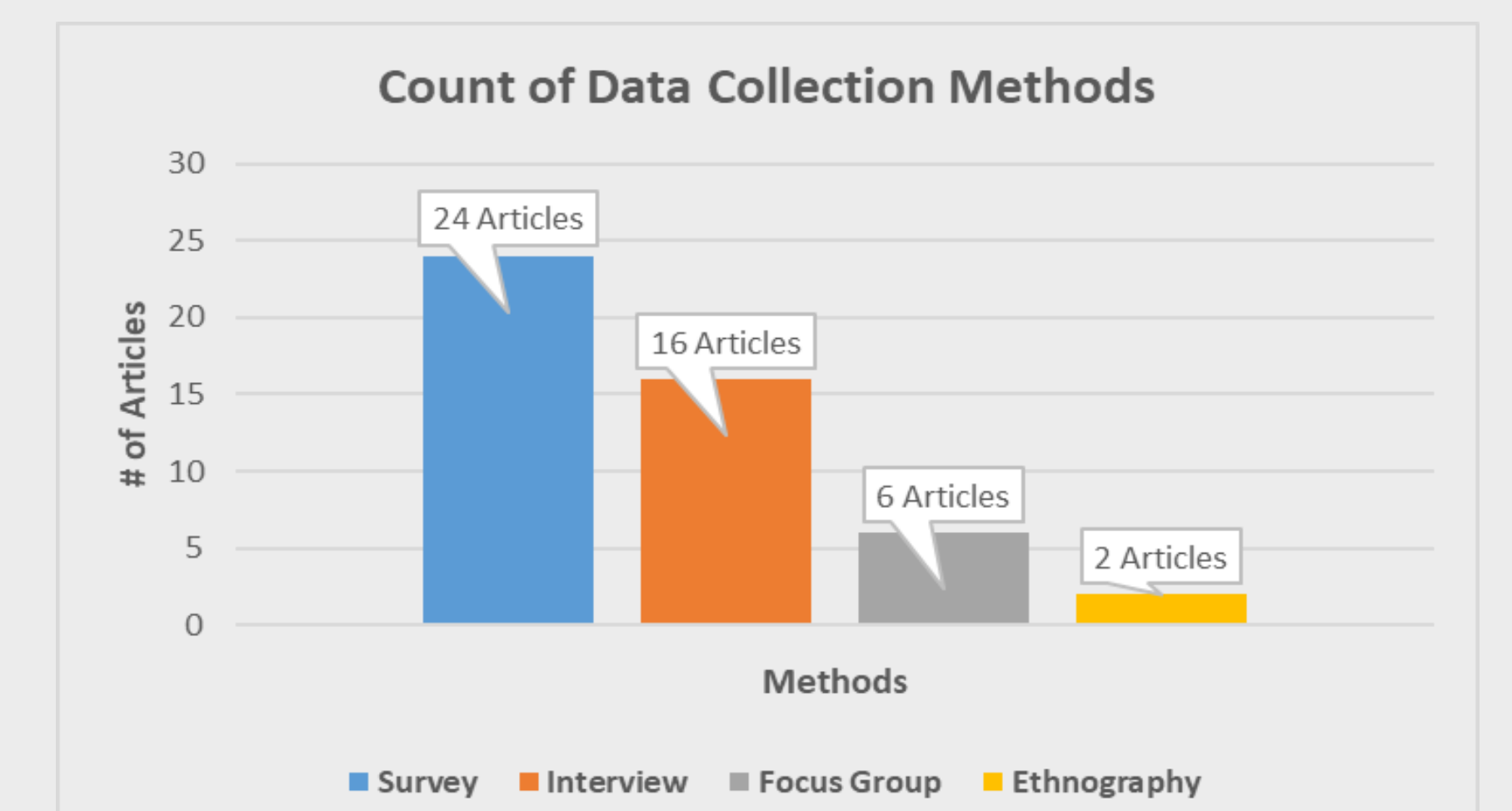
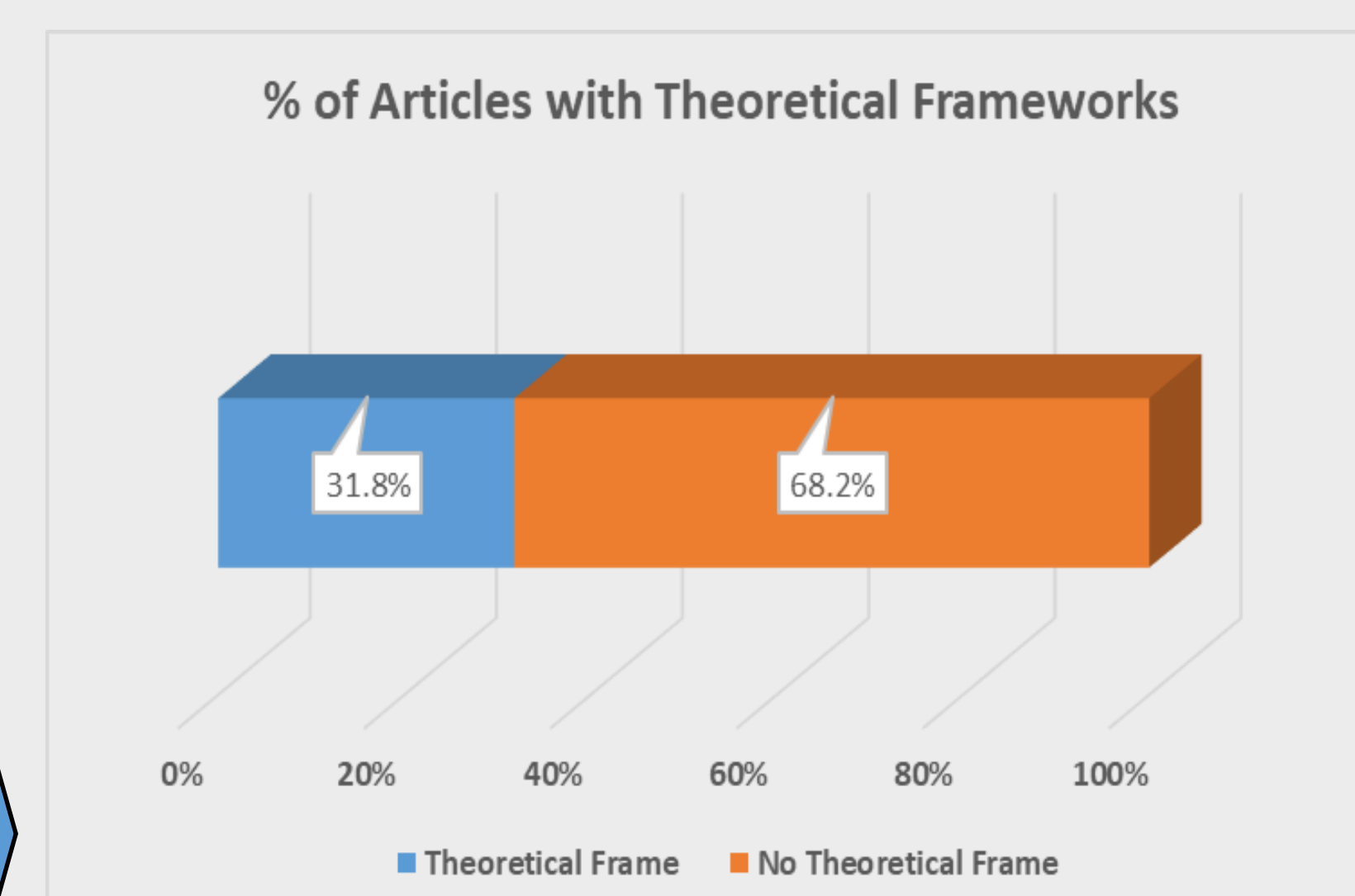


Preliminary Results

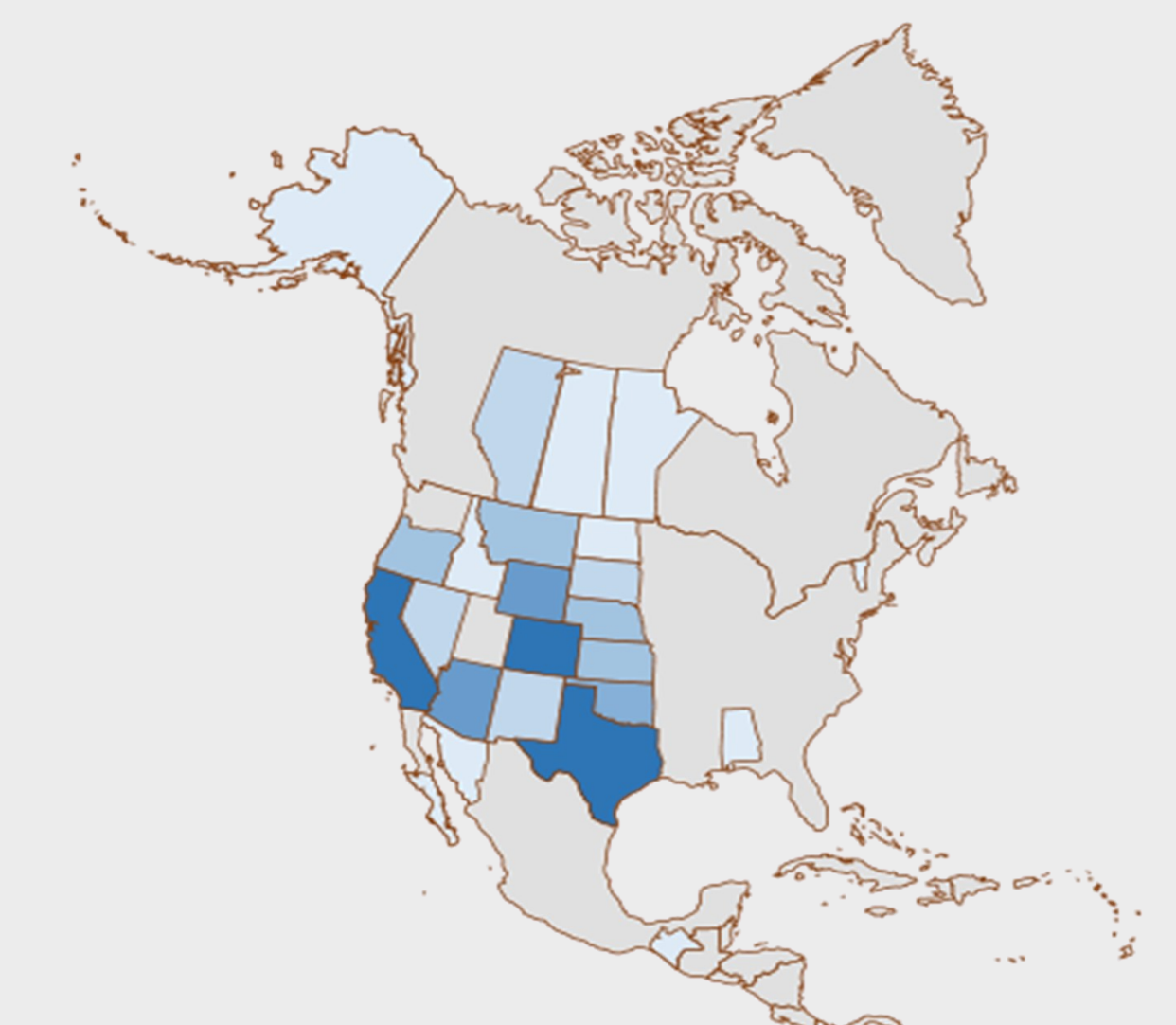
Results for the Full Article Set (N=419)



Results for the Article Sub-set (n=44)



Geographic Locations of Research



Conclusions and Implications

- There is a growing body of literature in rangeland social science. Given the prominent journals, it is evident that this growth is partially driven by range science. **This growing body of literature needs to be synthesized to identify knowledge gaps and limitations to inform future research. Given the increased prominence of rangeland social science, we need to consider how we train range science social scientists.**
- The use of theoretical frames in rangeland social science grounds the research in existing knowledge, establishes structure, and enables critical evaluation of assumptions, but the preliminary data indicates a low percent of papers are considering theoretical framed. **Thus, we suggest that future rangeland social science work employ and explicitly state theoretical frames.**
- Quantitative surveys are the dominant method used. The high use of quantitative surveys may limit our understanding and knowledge of rangeland decision-making. **There may be a need to employ a more diverse range of both qualitative and quantitative methods** in rangeland social science (Didier and Brunson, 2004).

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Charnley, S., et al. 2017. Evaluating the best available social science for natural resource management decision-making. *Environmental Science & Policy*, 73, pp.80-88.
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Pullin, A.S. and Stewart, G.B. 2006. Guidelines for systematic review in conservation and environmental management. *Conservation biology*, 20(6), pp.1647-1656.