



Connecting Conservation Policy and Marine Mammal Science: A Survey of Attitudes and Trends in Publications

Roxanne J Carini¹, Brady O'Donnell¹, Victoria Cornish¹, and Raychelle Daniel²

¹US Marine Mammal Commission, Bethesda, MD, USA

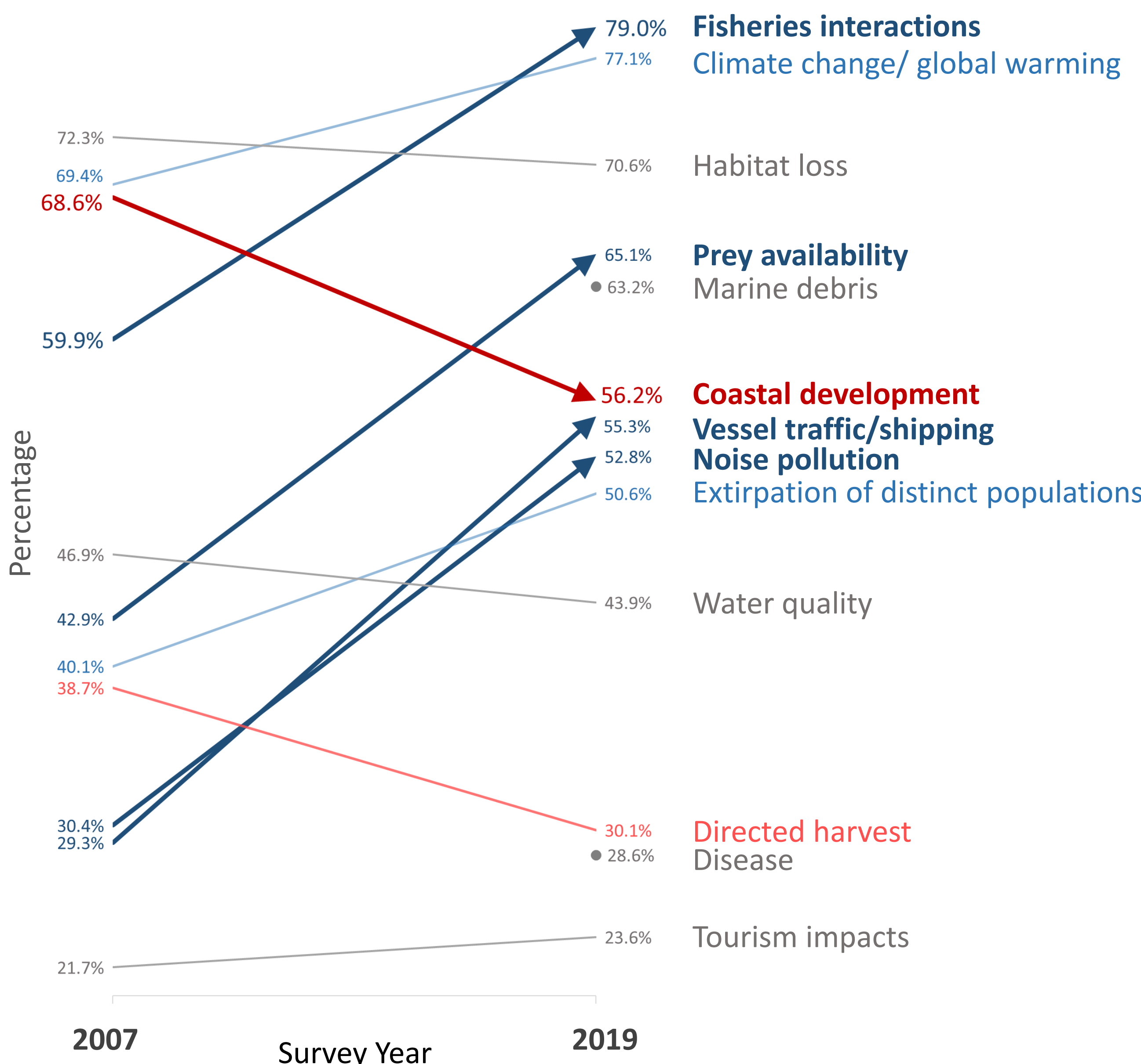
²The Pew Charitable Trusts, Washington, DC, USA



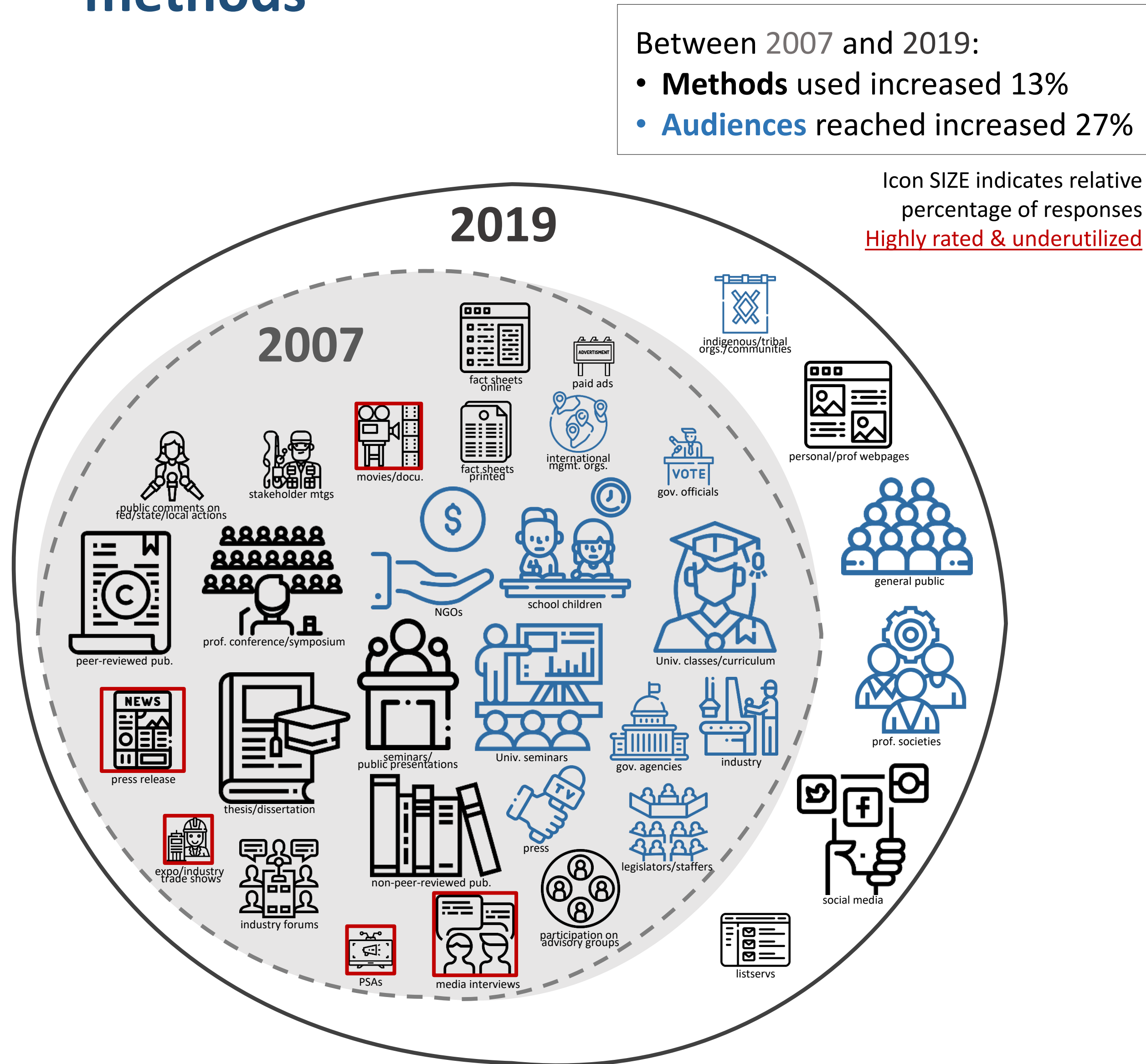
rcarini@mmc.gov

Key findings from a comparison of surveys and a literature review:

1. Conservation issues of highest concern shifted dramatically between survey years



3. Researchers/scientists are reaching a broader audience using a wider variety of methods



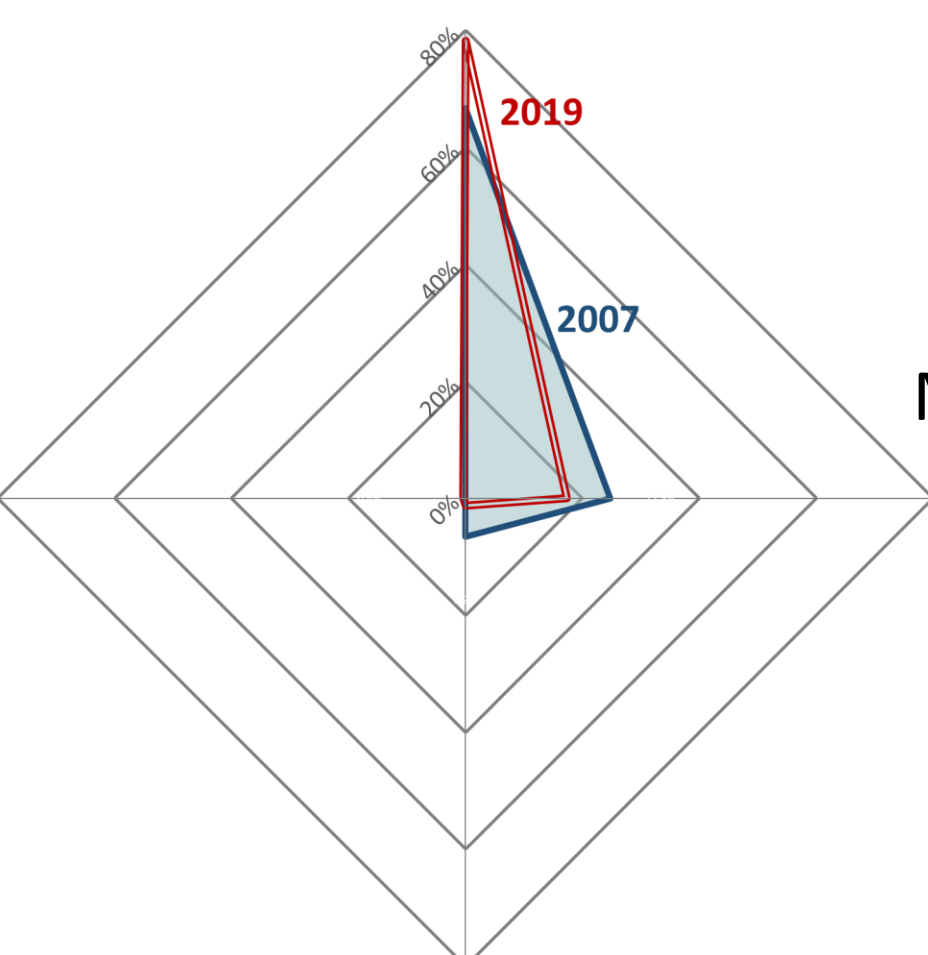
2. Attitudes are aligning towards active engagement in recommending policy or management actions

Researchers and scientists should:

Actively engage... in recommending specific management or policy actions

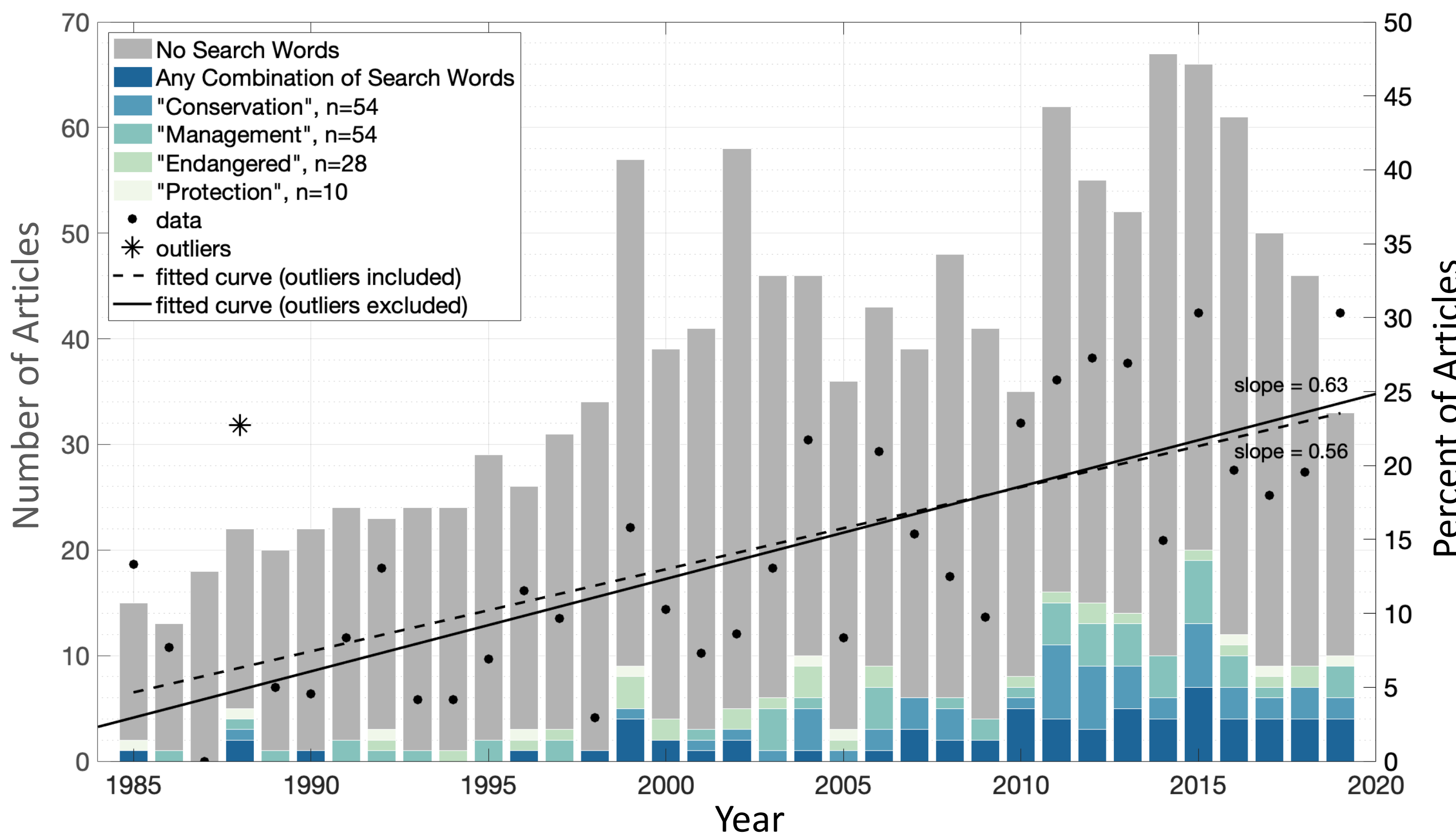
Avoid making any statements

Make recommendations... but avoid active engagement



4. Authors are emphasizing conservation in research-focused papers more often

Literature review:
Marine Mammal Science (1985-2019)



Survey: Communicating Science for the Conservation of Marine Mammals

This survey was conducted as an independent project by Roxanne J Carini, PhD, during her one-year Sea Grant Knauss Fellowship at the Marine Mammal Commission.

The purpose of this survey was to better understand attitudes/opinions and levels of engagement of those who work on marine mammal issues regarding how scientific results are applied to marine mammal conservation, policy, and management.

A similar survey was originally designed and conducted in 2007 by Vicki Cornish and Raychelle Daniel, while working for the Ocean Conservancy. The survey was re-administered, with minor changes for modernization, to assess current attitudes and how they might have changed since 2007. The survey consisted of multiple choice, check-box, rating, and open-ended questions related to marine mammal conservation. It was administered through Survey Monkey for a period of eight weeks. Participation is voluntary and anonymous.

The survey was not submitted to the Institutional Review Board (survey uses human subjects) for review due to time constraints, and therefore, peer-reviewed publication will not be pursued. However, the results will be distributed to the MARMAM list-serve and shared broadly with interested government agencies, non-governmental organizations, and others interested in improving communication efforts related to the conservation of marine mammals. Scan QR code for full access to the data and results summary.

If you have any questions about the survey or results, please contact the principal investigator at rcarini@mmc.gov.

Demographics of Survey Respondents:

| | |
|-----------------------------|---|
| Geographic Region | 48.5% US, 25% unknown (from 2019), 11.5% Europe, 6% UK/Ireland, 6.5% CAN, 53% other countries |
| Level of Education | 30% undergrad, 40% masters, 30% doctorate (88% science degrees) |
| Occupation | 82.5% research/science, 60% conservation, 56% education, 42.5% students (undergrad/grad), 30% management, 32% outreach, 23% policy, 23% tourism, 15.5% rescue/response/rehab, 14% consulting, 9% animal husbandry/trainer, 4% industry, 1.5% military |
| Relevant Region of Research | 33% NW Atlantic, 25% NW Pacific, 20% California Current/NE Atlantic/Gulf of Mexico, <20% other regions, global research represented |
| Funding Source | 66.5% public, 58% private, 31% personal/unfunded |
| Field of Research | 45-61% : conservation, behavioral ecology, habitat/distribution, or population biology/abundance 23-37% : acoustics/communication, fisheries interaction, policy/management, foraging ecology, health |

Literature Review:

Marine Mammal Science (1985-2019)

Edited By: Daryl J. Boness

Impact factor: 2.018

Online ISSN:1748-7692

© Society for Marine Mammalogy

<https://onlinelibrary.wiley.com/journal/17487692>

Using MATLAB Text Analytics and Statistics & Machine Learning toolboxes, searched for use of the words conservation, management, endangered, and protection within the title, abstract, and key words of each article (notes, reviews, books, errata, etc. not included). Data current as of 09 October 2019. Scan QR code for full access to the data and processing code.

Acknowledgements:

Thank you to all those who took the time to complete the survey! The principal investigator is grateful for the support of Washington Sea Grant, the NOAA/Sea Grant Knauss Marine Policy Fellowship, and the Marine Mammal Commission. Special thanks also to Anita Kinney for assistance collating the journal article information, and to Daryl Boness for helpful conversations about the history of the Journal of Marine Mammal Science.

For DATA:

