

June 19, 2019

The Honorable Raúl Grijalva  
Chairman  
Committee on Natural Resources  
Washington, DC 20515

The Honorable Rob Bishop  
Ranking Member  
Committee on Natural Resources  
Washington, DC 20515

Dear Chairman Grijalva and Ranking Member Bishop,

The undersigned 123 scientists seek your support for HR 2236, the Forage Fish Conservation Act. We represent a wide variety of areas of expertise, including fisheries biology and management, marine mammal and bird ecology, and social sciences, and as such, understand the crucial role that forage fish species play in marine ecosystems and the U.S. economy. We also know that this country must manage forage fish differently.

Forage fish are small- to medium-sized fish that play a key role in a productive marine ecosystem. There is an expansive, growing body of research that outlines the importance of these fish as food for recreationally and commercially important species such as tuna, salmon, Alaska pollock, and cod, as well as for seabirds, sharks, dolphins, and other animals that are integral to healthy fisheries and stable ocean ecosystems (Cury et al. 2011; Engelhard et al. 2014; Pikitch et al. 2014, Essington et al. 2015, Worsøe et al. 2018)

Forage fish mature early, live short lives, and produce substantial numbers of offspring. Because of these life history characteristics, they generally show significant fluctuations in population size. Shifts in forage fish populations can cause ripple effects through the marine food web. Declines in forage fish populations are often accompanied by marked changes in ecosystem structure, including sharp decreases in the marine bird and mammal populations that depend upon forage fish for food (Cury and Shannon 2004).

Forage fish species tend to form large schools, making them highly accessible to fishing, particularly as fishing gear and technologies become more efficient (Alder & Pauly 2006; Pikitch et al. 2012; Pikitch 2015). About one-third of wild marine fish caught globally are forage fish. However, most forage fish are not used directly as human food. Rather, an estimated 90 percent is

processed as feed for fish farms, poultry, and livestock, as well as human nutritional supplement (Alder *et al.*, 2008; Tacon & Metian, 2009). The potential for overexploitation of forage fish is high, increasing the potential for population collapses, after which recovery of the forage fish and species that depend upon them is uncertain (Pikitch *et. al* 2012; Pikitch 2015).

Conventional management of forage fish species does not adequately account for the population dynamics of forage fish and their role in the ecosystem. However, a risk-based management scheme that reduces exploitation rates on forage species results in fewer ecosystem impacts, including population collapses, with little effect on long term average forage fish catch. (Smith *et al.* 2011; Essington *et al.* 2015).

The Forage Fish Conservation Act will dramatically improve the management of forage fish to the benefit of all Americans and U.S. marine ecosystems alike by:

- Providing a national, science-based definition of forage fish;
- Limiting the establishment of new forage fish fisheries until there is scientific evidence to support their management and determine the impact the new fishery would have on the ecosystem and other fisheries
- Requiring that catch limits be set for forage fish in ways that account for predator needs; and,
- Conserving important forage species such as river herrings and shads.

The U.S. has long been a world leader in using science to inform how our fisheries are managed. The Forage Fish Conservation Act will enhance a critical but sometimes overlooked aspect of U.S. fisheries management to the benefit of all. We urge you to enthusiastically and in a bipartisan way support the Forage Fish Conservation Act.

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