



## Letter to the Editor

### We should not be afraid to talk about fear of failure in conservation



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We appreciate the comments of Catalano and Knight in response to our paper exploring fear of failure in conservation (Meek et al., 2015). We agree wholeheartedly with Catalano and Knight that “the study of failure in ESP [extremely small population] conservation actions could be a fruitful endeavor with implications for other threatened species, and attempts to introduce a new way of thinking about the causes of failure should be encouraged.” This was exactly our message. Hoping to encourage others to think about this under-explored area of conservation, our paper put forth a hypothesis that is consistent with pre-existing data and knowledge—that the fear of failure might explain delayed action—and provided potential solutions. The main point of the Catalano and Knight reply seems to be that, instead of introducing a new way of thinking in a perspective as we did, we should have conducted an empirical study. While we agree that there is a great need for more data exploring the causes of conservation failure, we feel the urge to delay discussion until after data collection stems from the same inaction trap we discuss in the paper. We need not wait for the perfect study of the fear of failure in conservation to begin fruitful discussion of the issue.

We used the cognitive psychology framework to organize discussion of what might lead to conservation inaction. We hope that by drawing links to applied psychology and other fields, conservation science can gain a more complete understanding of how to improve conservation practice and promote new areas of research. The ideas presented in our paper were supported by previous research from a variety of sources, including applied psychology and the conservation literature. At no point in the paper do we claim that all delay is caused by procrastination or the fear of failure. Rather, we state that some delays are rational and beneficial (citing real options theory). Indeed, one area that is primed for further exploration is research that evaluates the roles of rational delay versus behavioral delay in conservation decisions.

Catalano and Knight argue that the strength of the relationship between fear of failure and procrastination is weaker than we imply, and to support this argument they cite Haghbin et al. (2012). However, the use of this citation is misleading. Haghbin et al. (2012) do reference previous work that found weak average correlations between fear of failure and procrastination (Steel, 2007), however, they hypothesize that this was not because the two are not correlated, but because their correlation is conditional. As we detail in our paper's conclusion, Haghbin et al. (2012) find that perceived competence is a moderating factor: fear of failure is positively correlated with procrastination for those who feel low in

competence or expertise, and negatively correlated with procrastination for those who feel high in competence (Table 2 in Haghbin et al., 2012). Therefore, we agree that this relationship is complex, but disagree that we mischaracterized the strength of the relationship. Our paper specifically aimed to highlight solutions that could move institutions from the low-competence group where fear of failure causes procrastination to the high-competence group where fear of failure is a motivator.

Catalano and Knight remark that our paper may have caused unintended offense toward hardworking conservation practitioners by concluding that extinctions are the result of manager procrastination. Our paper targeted the effects of fear of failure at the level of institutions, not individuals. We focus on two of the five dimensions of the fear of failure precisely because they are the most relevant for fear of failure at the institutional level, rather than the individual. Further, we agree that extinctions result from diverse causes and only suggest that, in some cases, delays—of which some are the result of procrastination—contribute to extinction. It is our experience from many combined years of conservation work that conservation practitioners can feel hamstrung by the institutional fear of failure. This institutional fear can result in overly cautious policies and regulations that limit the efficacy of conservation practitioners to do their jobs. We provide tangible solutions to these institutional problems with the intent of supporting conservation practitioners to reform institutional policies and practices that unnecessarily limit their responsiveness to conservation problems.

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Mariah H. Meek

Department of Natural Resources, Cornell University, Ithaca, NY,  
 United States

Corresponding author.

E-mail address: [mhmeek@cornell.edu](mailto:mhmeek@cornell.edu)

Caitlin Wells

Department of Wildlife, Fish, and Conservation Biology, University of  
 California, Davis, CA, United States

Katharine M. Tomalty

Department of Animal Science, University of California, Davis, CA, United  
 States

Jaime Ashander

Center for Population Biology, University of California, Davis, CA,  
 United States

*Dept. of Environmental Science and Policy, University of California, Davis,  
CA, United States*

*Deborah L. Rogers  
Center for Natural Lands Management, Temecula, CA, United States*

*Esther M. Cole  
Land Use and Environmental Planning, Stanford University, United States*

*Erica Bree Rosenblum  
Environmental Science, Policy, and Management, University of California,  
Berkeley, CA, United States*

*Daphne A. Gille  
Department of Animal Science, University of California, Davis, CA, United  
States*

*Jason F. Shogren  
Department of Economics and Finance, University of Wyoming, Laramie,  
WY, United States*

*Breanna J. Putman  
Graduate Group in Ecology, University of California, Davis, CA, United States  
Department of Biology, San Diego State University, San Diego, CA, United  
States*

*Ronald R. Swaisgood  
Division of Applied Animal Ecology, San Diego Zoo Institute for  
Conservation Research, Escondido, CA, United States*

*Jonathan P. Rose  
Graduate Group in Ecology, University of California, Davis, CA, United States*

*Bernie May  
Department of Animal Science, University of California, Davis, CA, United  
States*

*Matthew S. Savoca  
Graduate Group in Ecology, University of California, Davis, CA, United States*

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*Lauren Yamane  
Department of Wildlife, Fish, and Conservation Biology, University of  
California, Davis, CA, United States*

*Joshua M. Hull  
Department of Animal Science, University of California, Davis, CA, United  
States  
U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office,  
Sacramento, CA, United States*