



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
Alaska Fisheries Science Center  
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Seattle, Washington 98115-0070  
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May 17, 2018

Dave Witherell, Executive Director  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252

Dear Dave:

The Alaska Fisheries Science Center offers Dr. Kalei Shotwell for your consideration to serve on the NPFMC Bering Sea and Aleutian Islands Groundfish Plan Team. Dr. Dana Hanselman is now on the SSC, and Kalei is being offered as Dana's replacement. Kalei has strong quantitative skills and knowledge of stock assessment. In addition, she has authored and co-authored numerous rockfish SAFE chapters for over ten years. Kalei's recent work on integrating ecosystem and socio-economic considerations with stock assessment through the development of Ecosystem and Socio-economic Profiles (ESP) is a major step to bring ecosystem-based science to the NPFMC. Kalei's participation will provide useful expertise and practical experience to the BSAI Plan Team. The breadth of her experience from hands-on stock assessment and ecosystem modeling combined with her strong quantitative skills, should make Kalei a valuable asset to the Plan Team. Her CV is enclosed for your consideration.

We appreciate the opportunity to provide scientists in support of the NPFMC plan teams.

Sincerely,

*Doug DeMaster*

Douglas P. DeMaster, Director, AFSC, NOAA Fisheries

Cc: F/AKC/ABL Pete Hagen  
F/AKC/ABL Jon Heifetz

Attachment



## S. KALEI SHOTWELL

Auke Bay Laboratories TSMRI/AFSC/NMFS/NOAA  
17109 Pt. Lena Loop Rd., Juneau, AK 99801  
(907) 789-6056, [Kalei.Shotwell@noaa.gov](mailto:Kalei.Shotwell@noaa.gov)

### EDUCATION

University of Oregon, OR	BS	Biology, departmental honors	1998
R.D. Clark Honors College, OR			1998
University of Alaska Fairbanks, AK	PhD	Fisheries	2004

### APPOINTMENTS

**2010-present: Principal Investigator, Gulf of Alaska (GOA) Project, NPRB**  
Responsibilities: Board of Investigators representative for fisheries management, Associate Editor GOA-IERP special issues, lead habitat and IBM modeling applications to stock assessment, synthesis papers, presentations

**2004-present: Research Fish Biologist, Auke Bay Laboratories, TSMRI-AFSC**  
Responsibilities: conduct Alaska groundfish stock assessment, lead ecosystem and socioeconomic profiles (ESP) for Alaska stock assessments, assist with stock assessment prioritization, lead benthic habitat research projects, chief scientist and participant on surveys

**1999-2004: Graduate Research Assistant, University of Alaska Fairbanks**  
Responsibilities: abundance estimation, forecasting with environmental information, simulation modeling, lecturing

### SELECTED PUBLICATIONS AND TECHNICAL REPORTS

**Shotwell, S.K., B. Fissel, D. Hanselman (Ed.).** 2017. Ecosystem-Socioeconomic Profile of the Sablefish stock in Alaska. *In* Assessment of the sablefish stock in Alaska, stock assessment and fishery evaluation (SAFE) report. NPFMC. Anchorage, AK 99501. 26 pp.

**Shotwell, S.K., D.H. Hanselman, P.J.F. Hulson, and J. Heifetz.** 2005-2017. Assessment of the Rougheye and Blackspotted Rockfish stock complex in the Gulf of Alaska. *In* stock assessment and fishery evaluation (SAFE) report for the GOA. NPFMC. Anchorage, AK 99501.

**Barbeaux, S. K. Aydin, B. Fissel, K. Holsman, W. Palsson, K. Shotwell, Q. Yang, and S. Zador.** 2017. Assessment of the Pacific cod stock in the Gulf of Alaska. *In* stock assessment and fishery evaluation (SAFE) report for the GOA. NPFMC. Anchorage, AK 99501.

**Fenske, K.H., C.R. Lunsford, P.J.F. Hulson, D.H. Hanselman, and S.K. Shotwell.** 2017. Assessment of the Dusky Rockfish stock in the Gulf of Alaska. *In* stock assessment and fishery evaluation (SAFE) report for the GOA. NPFMC. Anchorage, AK 99501.

**Pirtle, J.L., S.K. Shotwell, M. Zimmermann, J.A. Reid, N. Golden.** 2017. Habitat suitability models for groundfish in the Gulf of Alaska. Deep Sea Research II, Special Issue 2: Gulf of Alaska Project.

**Hulson, P.J.F., D.H. Hanselman, and S.K. Shotwell.** 2017. Investigations into the distribution of sample sizes for determining age composition of multiple species. Fish. Bull. 115: 326-342.

**Shotwell, S.K., D.H. Hanselman, S. Zador, and K. Aydin.** 2016. Stock-specific Profiles and Ecosystem Considerations (SPEC) for Alaska groundfish fishery management plans. Report to NPFMC, 15 pp.

Echave, K.B., S.K. **Shotwell**, and P.J.F. Hulson. 2016. Assessment of the Thornyhead Rockfish in the Gulf of Alaska. *In* stock assessment and fishery evaluation (SAFE) report for the GOA. NPFMC. Anchorage, AK 99501.

Hollowed, A.B., K. Aydin, K. Blackhart, M. Dorn, D. Hanselman, J. Heifetz, S. Kasperski, S. Lowe, and K. **Shotwell**. 2016. Stock assessment prioritization for the NPFMC: Methods and Scenarios. Report to Joint Groundfish Plan Team, September 2016. 17 pp.

Hulson, P.J.F., D.H., Hanselman, S.K. **Shotwell**, C.R. Lunsford, and J.N. Ianelli. 2016. Assessment of the Pacific ocean perch stock in the Gulf of Alaska. *In* stock assessment and fishery evaluation (SAFE) report for the GOA. NPFMC. Anchorage, AK 99501.

Moss, J., S.K. **Shotwell**, R. A. Heintz ... 2016. Surviving the Gauntlet: A comparative study of the pelagic, demersal, and spatial linkages that determine groundfish recruitment and diversity in the Gulf of Alaska ecosystem. NPRB GOA Project Upper Trophic Level Final Report. 374 pp.

Yasumiishi, E., **Shotwell**, S.K., Hanselman, D.H., Orsi, J., and Ferguson, E. 2015. Using Salmon Survey and Commercial Fishery Data to Index Nearshore Rearing Conditions and Recruitment of Alaskan Sablefish. *Marine and Coastal Fisheries: Dynamics, Management, and Ecosystem Science* 7: 312-324.

**Shotwell**, S.K., D.H. Hanselman, and I.M. Belkin. 2014. In search of biophysical synergy: investigating advection along the Polar Front to identify factors influencing Alaska sablefish recruitment. *Deep Sea Research II*: 107: 40-53.

## **TRAINING AND FIELD EXPERIENCE**

- NOAA Satellite Training, 2006, 2007; AD Model Builder, UAF, 2003, 2013; Oracle SQL Developer, AFSC, 2012; Git/Hub workshop, 2014, 2017; R, Adobe Creative Suite online training, 2016-2017
- Certified NOAA Working Diver, PADI Divemaster, CPR/1<sup>st</sup> Aid, Oxygen 1<sup>st</sup> Aid, marine survival, small boat operations
- 30+ surveys (1998-2017) conducting research with hook-and-line, pots, trawls, gillnets, longlines, plankton nets, CTD's, tagging, hydroacoustics, submersibles, and scuba

## **COLLABORATIONS (LAST 48 MONTHS)**

K. Aydin (AFSC), S. Barbeaux (AFSC), I. Belkin (URI), K. Blackhart (ST), M. Dorn (AFSC), M. Doyle (JISAO), K. Echave (AFSC), E. Fergusson (AFSC), G. Gibson (UAF), N. Golden (USGS), D. Hanselman (AFSC), J. Heifetz (AFSC), R. Hopcroft (UAF), P. Hulson (AFSC), R. Heintz (AFSC), A. Hollowed (AFSC), P. Hulson (AFSC), J. Ianelli (AFSC), S. Kasperski (AFSC), C. Ladd (PMEL), S. Lowe (AFSC), C. Lunsford (AFSC), P. Lynch (ST), J. Moss (AFSC), F. Mueter (UAF), O. Ormseth (AFSC), J. Orsi (AFSC), J. Pirtle (NRC), J. Reid (USGS), C. Rodgveller (AFSC), C. Rooper (AFSC), I. Spies (AFSC), S. Strom (WWU), E. Yasumiishi (AFSC), M. Zimmermann (AFSC).

## **SYNERGISTIC ACTIVITIES**

- Alaska Fisheries Science Center Representative for NOAA's Fisheries and the Environment (FATE) Program to review fishery oceanography to improve stock assessment proposals (2012-2018)
- Detail with Office of Science and Technology, NMFS to assist with producing the 2018 NOAA Fisheries Stock Assessment Improvement Plan (2016-2018)
- NOAA 2008 Department Bronze Award for advancing conservation through spearheading the first peer-reviewed assessment of the state of deep coral ecosystems of the United States.
- Center for Global Change 2002 Student Grant recipient for exploring the utility of climate change in forecasting salmon returns