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Jennifer Nielsen,
USGS/ Alaska Science Center
1011 East Tudor Rd
Anchorage, AK 99503

Re: William E. Ricker Resource Conservation Award

Dear Jennifer,

I am writing in support of the nomination of Dr. David Fournier for the William E. Ricker Resource Conservation Award. As a former state scientist for the Washington Department of Fish and Wildlife (1976-2003), and currently as a private consultant, I have been involved in the estimation of fish stock abundance since 1980. I became familiar with Dr. Fournier in the early 1980's as we struggled to estimate the population abundance of Pacific coast rockfish (*Sebastes* spp.) stocks. The seminal paper of Fournier and Archibald (1982) led to a state change in the way we approached population modeling. Prior to this paper, our models were predominately deterministic (surplus production, cohort analyses, delay difference); but, with the introduction of a statistical basis for modeling that integrated multiple data sources a quite revolution in population modeling began.

As a state scientist, we were not so much innovators but more practitioners of stock assessment. Access to tools that allowed the implementation of innovative assessment techniques was highly desirable. From the mid-1980s to the mid-1990s I relied on early version of the Stock Synthesis program (Methot, 1986 and 1990) to estimate fish abundance. However, with the introduction of Dr. Fournier's AD Model Builder software we were able to implement custom statistically based population models. My first attempt was an assessment of Pacific coast yellowtail rockfish (Tagart et al., 1997). Working with my colleagues at the WDFW, we subsequently developed custom models for black rockfish (Wallace et al, 1999) and lingcod (Jagiello, et al 2000) using AD Model Builder software. This software provided an adaptable tool, capable of estimating parameters for complex non-linear models.

I give my full support to the nomination of Dr. David Fournier for the William E. Ricker Resource Conservation Award. The integrated approach to population modeling and the development of the AD Model Builder tool set provided by Dr. Fournier gave me and my colleagues the means to apply quantitative population dynamics and ecological modeling techniques to generate credible estimates of abundance and recommendations for harvest regulations of highly vulnerable fish stocks. Many of my analyses would either not be possible or would have required extensive additional effort on my part if it were not for Dr. Fournier's AD Model Builder software. Additionally, I have been pleased to see other modelers who have adapted Dr. Fournier's tools to their stock assessment problems. Dr. Fournier is well deserving of this nomination for the William E. Ricker Resource Conservation Award.

Sincerely,



Jack V. Tagart, Ph.D.

Literature Cited:

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