2007 May 9

Ed Bangs U.S. Fish and Wildlife Service Ecological Services Montana Field Office 585 Shepard Way Helena, Montana 59601 USA

Dear Ed:

I have studied the delisting proposal for gray wolves in the Northern Rocky Mountains of the United States as published in the Federal Register. In general I found this to be professionally done and scientifically sound. Certainly I have a few details about which I might quibble and I do not think that the appropriate literature was cited in a few instances, but these matters do not bear on the overall substance of the delisting proposal. I cannot think of any scientific rationale that would contravene the delisting proposal by the US Fish and Wildlife Service.

Specifically I was asked to address the following questions:

- 1. "Is our description and analysis of the biology, habitat, population trends, historic and current distribution of the species accurate?" Yes.
- 2. "Does our document provide accurate and adequate review and analysis of the factors affecting the species?" To my mind there is inadequate attention paid to ungulate management in the face of wolf predation. Predator-prey interactions are confounded by human harvest of prey, and little attention was given to the difficulties of managing such complex systems. Certainly there is evidence that wolves can coexist with human hunting of ungulates, but this is beyond the experience of most wildlife managers in the western United States.
- 3. "Are our assumptions and definitions of suitable habitat logical and adequate?" Yes.
- 4. "Are there any significant oversights, omissions or inconsistencies in the proposed rule?" I was surprised that more attention wasn't given to the management of wolf populations in the context of ungulate management. Managing both predators and prey will be a significant challenge to the state agencies that will assume management for wolves subsequent to delisting. Perhaps the Fish and Wildlife Service perceives this to be the domain of the state agencies, but it is likely to be a major factor determining the success of state agencies in meeting their conservation mandate.
- 5. "Are our conclusions logical and supported by the evidence we provide?" Yes.

6. "Did we include all necessary and pertinent literature to support our assumptions and conclusions?" I believe that the literature review was sufficient, although not very complete. The complexity of ecosystem interactions emerging subsequent to wolf recovery is still unfolding, and many uncertainties remain about the full extent of effects resulting from wolf recovery and how best to manage in response. But this has little bearing on the decision to delist, which seems to me fully justified by the published proposal.

Sincerely,

Mark S. Boyce

Wark S. Songer

Professor of Biological Sciences, and

Alberta Conservation Association Chair in Fisheries and Wildlife