Martha Hall

Thank you for the opportunity to comment on the possible use of Imidacloprid to kill ghost shrimp.

It isn't necessary to read very much of the file before deciding that this is a very bad idea. It seems like these items in the summary provide sufficient evidence that WDFW should not be spraying Imidacloprid into the waters of Washington State:

1. Immediate adverse, unavoidable impacts to juvenile worms, crustaceans, and shellfish to the areas treated with Imidacloprid and the nearby areas covered by incoming tides.

2. Limited impacts bay-wide, but that there is significant uncertainty about the cumulative impacts and other unknown impacts to other marine invertebrates and life cycles.

- Little known direct risk to fish, birds, marine mammals, and human health.
- 3. Potential indirect impacts to fish and birds if food sources are disrupted.
- 4. There are still knowledge gaps about Imidacloprid. Further research is needed.

It is time for WDFW to take an ecosystem approach when managing our state's wildlife. Singling out and killing one species, this ghost shrimp, to help commercial oyster farms makes no sense, scientifically, when the impacts on most species is not understood. There is a chance that some endangered species, fish and birds, may be impacted. Some of the species that Imidacloprid spraying will kill are food for many other species, as are ghost shrimp. I can't believe WDFW is even considering this approach.

Why not examine the cause of the huge increase in this species of ghost shrimp? What role in this increase can be attributed to the oyster farms, the species of oyster they raise, and/or their management practices? How has the chemistry of these bays/harbors changed over the years? What has happened to the natural food chains in these bays over the years?

Probably oyster farming has also meant the loss of habitat and numbers of many native species. Is oyster farming worth it? Would these bays be more productive if oyster farming changed or did not exist?

We keep discovering that chemicals are not the answer. They often end up destroying far more than we expect when they are approved. The spraying won't even get rid of the shrimp, and do we really want to get rid of this shrimp? Most likely the surviving shrimp will develop a resistance to this pesticide - or it will be found to be too dangerous and will be banned like the carbaryl that was previously used.

We have too many ecosystems showing stress and collapsing already. We have too many endangered species. Yet WDFW is considering use of a new pesticide in some of the most ecosystems in our state? I wonder how productive these bays would be for all citizens of WA State if oyster farms were removed?