Interactive comment on “Trawl macrofauna of the Far-Eastern Seas and North Pacific: proportion of commercial species, potential product yield, and price range” by Igor V. Volvenko et al.

Anonymous Referee #2

Received and published: 10 August 2019

Dear editor and authors,

I find it very difficult to understand the rational behind the current presentation of the manuscript. In general, the idea to link data from scientific surveys to catch data and potential value is not overly unique and it is very difficult for me to understand who would use such a database...

I have several general comments and concerns: 1) the data set is covering the period from 1977-2014 and therefore also covers a period with significant environmental changes. Thus it would be very interesting to understand which species have been found in which area at which time and not only present a checklist with information
whether a species has been caught with which gear... I would imagine that coverage of surveys in a given year varies and thus a statistical survey index for each species for each year would be deemed more useful than just the presence or absence in a given area... Also, how is abundance and distribution related to a number of variables like water temperature or atmospheric indices influencing temperature and currents? Can future abundance and distribution be estimated?

2) the same is true for catch data: instead of a current status of exploitation indicating just if a species is exploited or not, the actual catch in a given year would be a useful information to identify trends in exploitation.

3) ex-vessel prices are dependent on many things and are normally highly volatile. Thus a minimum price seems not very meaningful as information. Again, the trend of the price in relation to at least the catch in that specific area and the global catch of that species would be more helpful. If there are several global stocks exploited of the same species, e.g. cod. then price of fish harvested from small stocks is likely highly dependent on the largest catch of that species (e.g. Barents Sea cod is driving the global price and not North Sea cod or Baltic cod...). Price of a given species is also dependent on current preferences and substitution elasticity, i.e. that if species are easy to substitute with other fish like Alaska Pollock with other fish with white meat, than price is not only dependent on the current catch of this one species. The influence of preference can be clearly seen for example on roe of pacific herring, which is mainly consumed as sashimi and sushi in Japan. The change in preference over the last decade has already a large impact on demand, price and catch...

A very valuable information would be the relation between harvested 'species' and actual species, e.g. are several species harvested as one species than there is the risk of overharvesting the least resilient species of that complex.

In light of my above comments I am left a bit clueless of what to recommend, but as this is an interactive review, I am very interested in the answer of the authors on this.