

Review of “WhoseEgg: Classification software for invasive carp eggs”, PeerJ-78577

This study describes a new web-based called WhoseEgg: an R Shiny application that allows non-R users to access random forests via a point and click interface to identify fish eggs with an objective of detecting invasive carp (Bighead, Grass, and Silver Carp) in the Upper Mississippi River basin. Given the ongoing negative effects of these carps in their invaded range, this is a relevant topic for aquatic scientists and managers interested in understanding how to better detect and monitor their populations, especially in emerging invasion areas. The manuscript is rather well written and straightforward, and the analyses are adequate and appropriate, though I do have a few comments and suggestions detailed below.

General comments:

The authors do a good job of introducing and describing the app, but I commend them for the detailed description of limitations about appropriate uses and such – this is important to include so that users can decide whether their data should be run through the app or if they should focus on developing their own random forests. Also, the Example is the most-useful part of this paper, walking readers through the process step by step – very well done.

Specific comments and suggestions:

*page numbers refer to review document pages, as the manuscript does not have page numbers.

Minor point, but authors on P4 have different affiliation numbers than on P5.

P6 L41 – if you state genetic ID is expensive and slow, can you add “rapid” to your assertion that WhoseEgg is inexpensive?

P6 L46 – suggest “web-based point-and-click”

P6 L63 – Introduced where? I know where, but readers might not.

P6 L68 – is an ISU thesis your best option for a plankton citation here? Certainly there are several peer-reviewed options available from the Upper Mississippi River basin, especially the Illinois River.

P8 L127 – suggest “web browser” and “laptop or desktop computer”.

P10 L196 – suggest “comprising” instead of “composing”

P13 L331, 332 – need binomial names for walleye and black carp, and also probably those species listed in Table 2.

Table 2 – what is an “other” buffalo? Do you mean “unidentified”? Same for shiners.