Reviewer's report

Title: Schistosomiasis transmission at high altitude crater lakes in Western Uganda

Version: 2 Date: 15 April 2008

Reviewer: Russell Stothard

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The paper is interesting and opens up a debate about the absolute limits where intestinal schistosomiasis could occur in Uganda.

I am supportive of this paper being published but I would like to see the following changes made.

1) Please draw a sketch map and locations of the sampled population and crater lakes.

2) Could you comment if the Biomphalaria were found to shed schistosome cercariae? Could you provide an image of the shell of typical encountered snails to help portray the confusion between pfeifferi and sudanica.

3) Given that the sampled human population aged from 6-18, how can you be sure that these children have not been infected elsewhere in Uganda through local travel?

It is certain that the children are using the waters of these volcanic lakes and could be picking the infection there but their travel/movement to areas outside this lake system is also likely. For example, do they ever have contact with Lake Albert/Edward/Kazinga shorelines which are not that far away?

Absolute proof of transmission comes from 2 important observations:

a) you find proven schistosome infections in local snails (shedding cercariae).

b) you detect intestinal schistosomiasis in non-migratory parts of the local population i.e. very young children.

It would be useful for the authors to read and cite an appropriate article by Stothard & Gabrielli (2007). Trends in Parasitology 23,
83-86. Which uncovers that infants and preschool children are typically infected in high transmission foci, as these children do not have the travel opportunities which older children have, this younger agegroup is better proxy of real geographic distribution of transmission than older children.

4) Please refrain from using "data is" it should be "data are".