Outline of helminths paper

1. Abstract
2. Introduction
3. Methods
   1. How does this field work?
      1. Community studies, climate data, geographical data
      2. Data incorporated into datasets, which can be used for…
         1. Raw prevalence mapping
         2. Prevalence modeling
         3. Risk mapping
         4. Ecological niche modeling
         5. …and more
      3. These mapping and modeling efforts are helpful for predicting disease burden, and they can be used to target preventative public health interventions or mass drug administration (MDA)
   2. How have mapping methodologies changed over time?
      1. Emphasis on the shift toward ecological niche modeling and other types of modeling
      2. Emphasis on the shift toward mapping/modeling software that are financially accessible and allow for collaboration with people in developing countries
      3. Methodologies pie chart
4. What we know about human helminthiases
   1. Overview of the global burden of helminthiases
      1. Probably over 2 billion people have these?
      2. They are neglected tropical diseases so we don’t know much about them as a whole
   2. We know a lot about the soil-transmitted helminths, schistosomes, and some other food- or vector-borne helminths such as W. bancrofti and O. volvulus because of their high global burden and the deaths and/or DALYs associated with them
      1. Some information about the burden of these conditions is available in the Global Neglected Tropical Disease Database
         1. Includes data on neglected tropical diseases from thousands of survey locations
      2. Global Health Data Exchange estimates deaths, DALYs for various common helminth infections
      3. Several studies estimate global burden of each of these infections, though estimates are often imprecise and vastly different from each other
   3. Existing MDA interventions and their efficacy
   4. There are 232 species of human helminths
   5. There have been 486 efforts to map 46 of them
      1. Bar graph with mapping efforts by species
      2. Pie chart or some kind of table showing the mode of transmission for each of these?
         1. Could help illustrate that we’re dedicating most of our resources to STH rather than vector-borne or food-borne helminths
      3. Short profile on the most widely studied helminths similar to our top ten list showing how many people have these, the severity of the conditions they cause, what we know about where they’re located, and what kinds of interventions have been implemented?
      4. Host/vector pie chart and other pie charts?
5. Gaps in research
   1. Gap maps showing where we have studies and where we’re lacking them
   2. Discussing understudied species, regions, etc.
   3. Information about syndemics and coendemicity
      1. Important because of drug interactions, helminth infections worsening certain conditions (e.g. HIV and schistosomiasis)
6. Future work
   1. How does GDP compare to number of mapping efforts?
   2. How does burden compare to number of mapping efforts?
   3. Priorities for future work