

Do snails love saunas?

Distributional changes of *Bulinus truncatus*, intermediate snail host of schistosome parasites, in the face of climate change

Seevec2

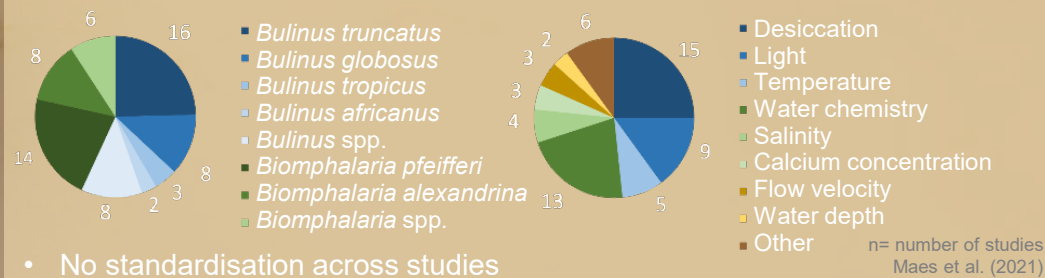
Background

- The distribution of freshwater snail hosts determines where tropical diseases like schistosomiasis can become endemic.
- Temperature is an important determinant but experimental data are scarce.
- Here we want to test the effect of increasing water temperature on life-history traits of *Bulinus truncatus*, a species transmitting human and animal schistosomiasis.
- The ecological data collected in our experiment could increase the accuracy of snail distribution forecasts under a changing climate.



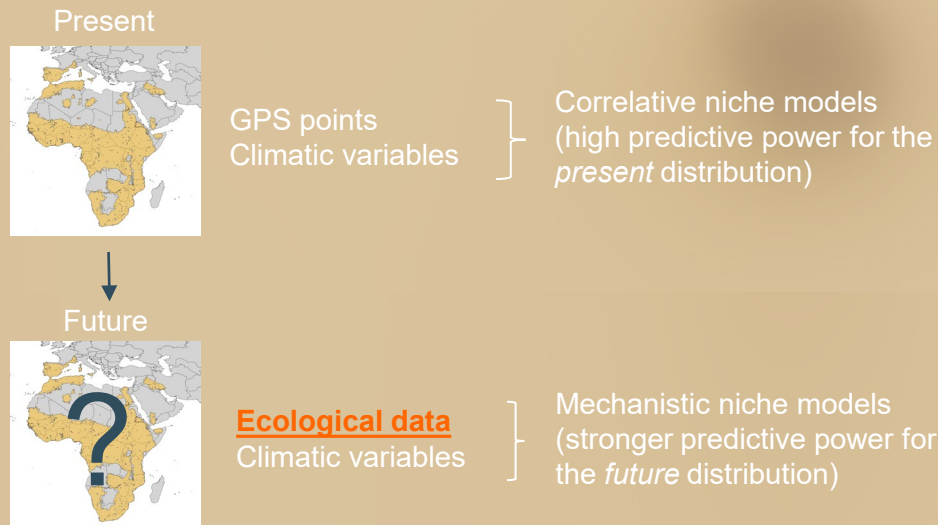
Lack of ecological data

- Research efforts differ between (a) species and (b) abiotic factor studied.

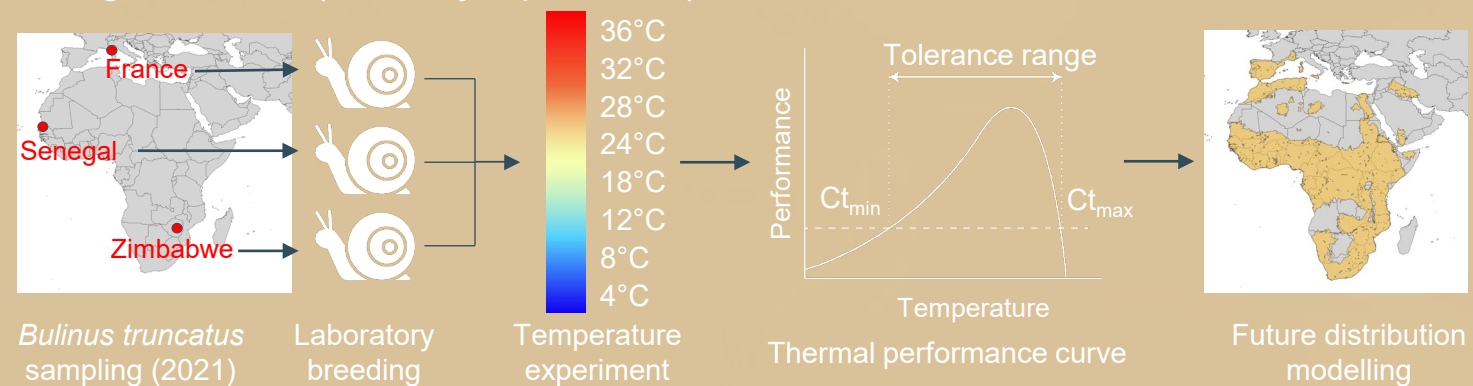


- No standardisation across studies
- Flawed experimental designs (e.g. small sample sizes, pseudoreplication)

Modelling snail distributions



Data generation (January-April 2022)



Conclusion

The data generated during the temperature experiment will be used in mechanistic niche models that increase the accuracy of *Bulinus truncatus* distribution forecasts (and thus schistosomiasis risk) under a changing climate.

