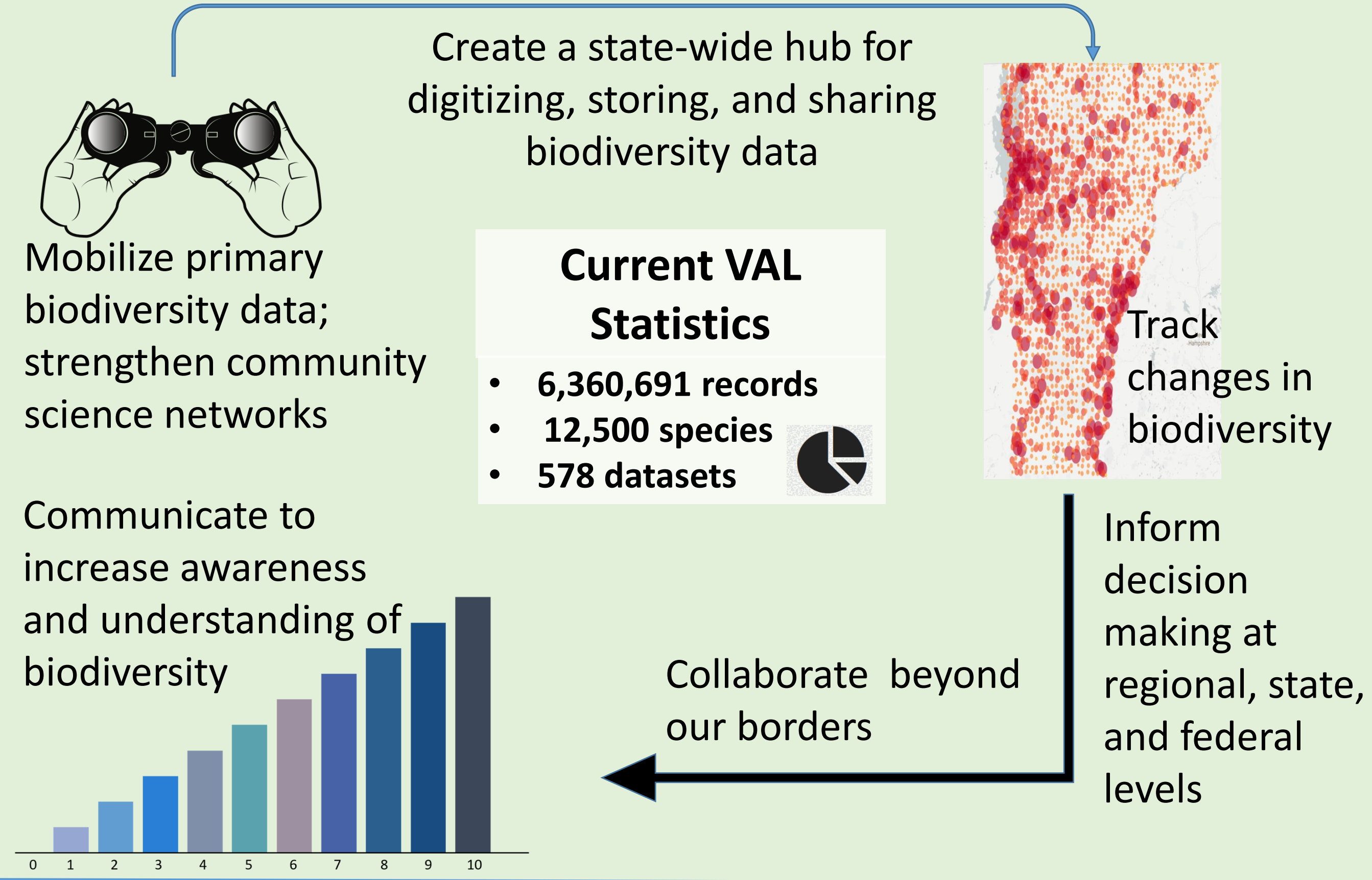


# Vermont Atlas of Life (VAL)

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Spencer Hardy<sup>1</sup>, Jason Loomis<sup>1</sup>, Nathaniel Sharp<sup>1</sup>, Kent P. McFarland<sup>1</sup>

## VAL Objectives & Goals

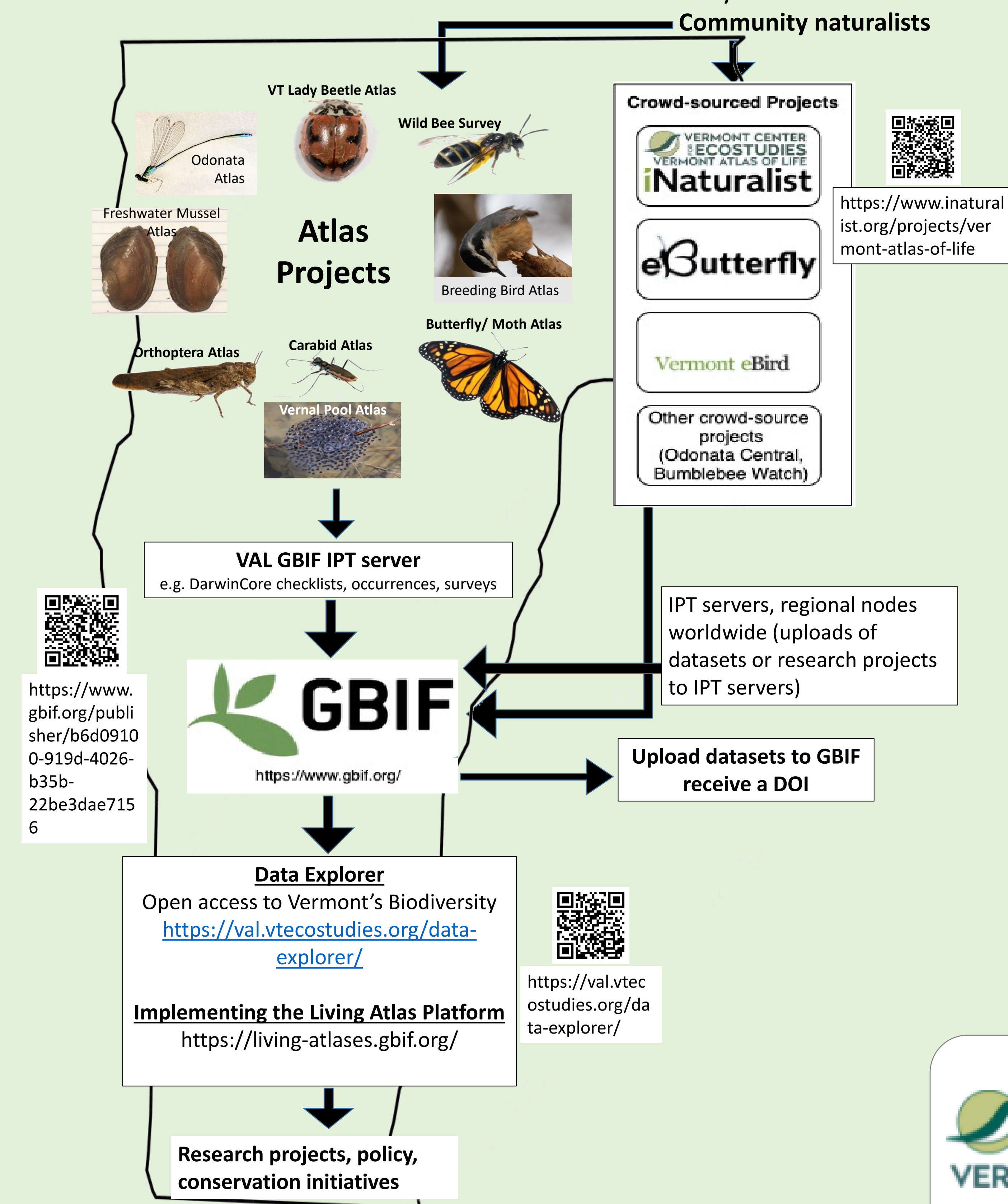


### Current VAL Statistics

- 6,360,691 records
- 12,500 species
- 578 datasets

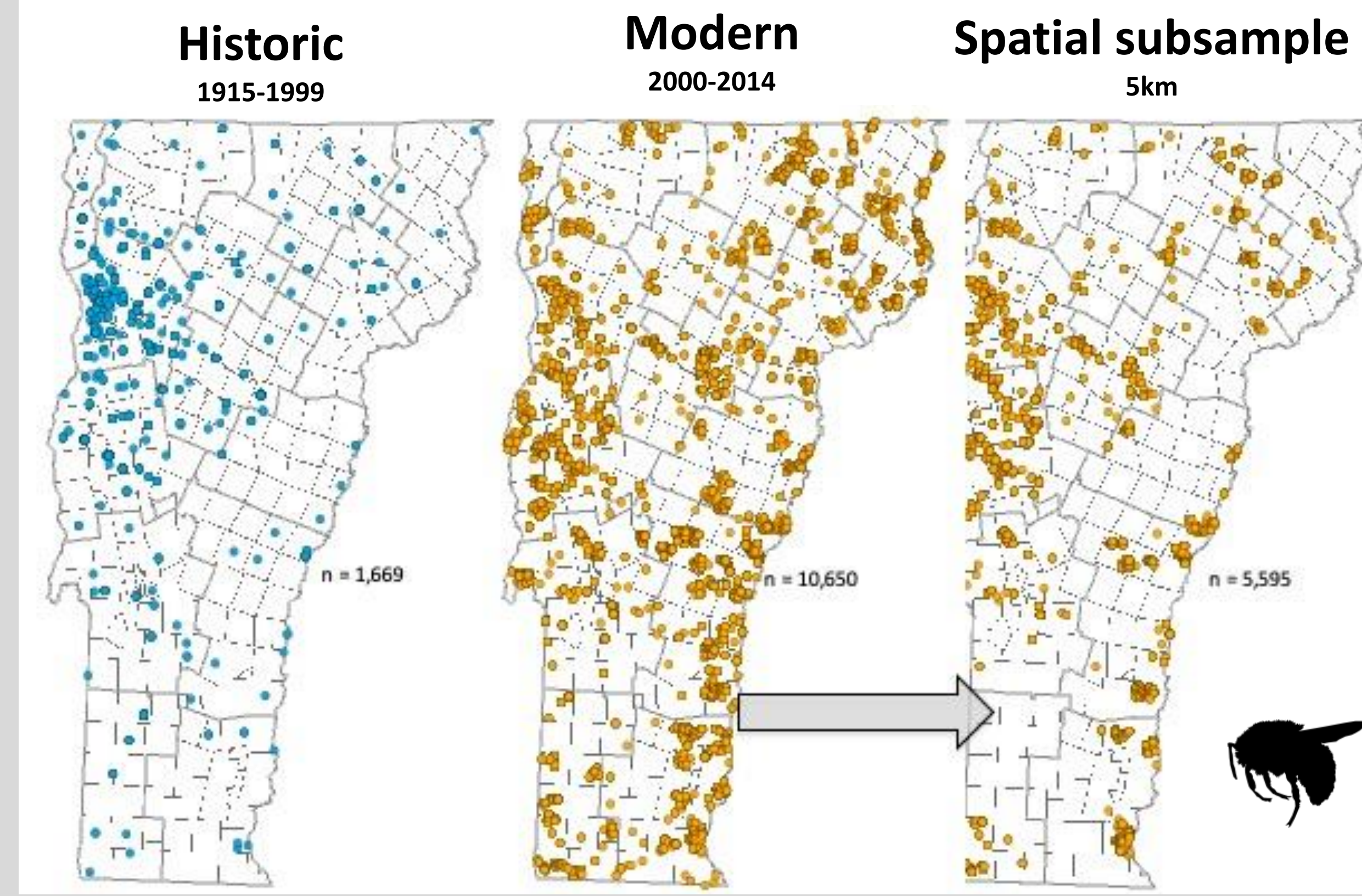
## How VAL Works

VAL enables open access to primary biodiversity data and visualization tools, furthering collaborative efforts between scientists, organizations, and naturalists to monitor and conserve biodiversity.

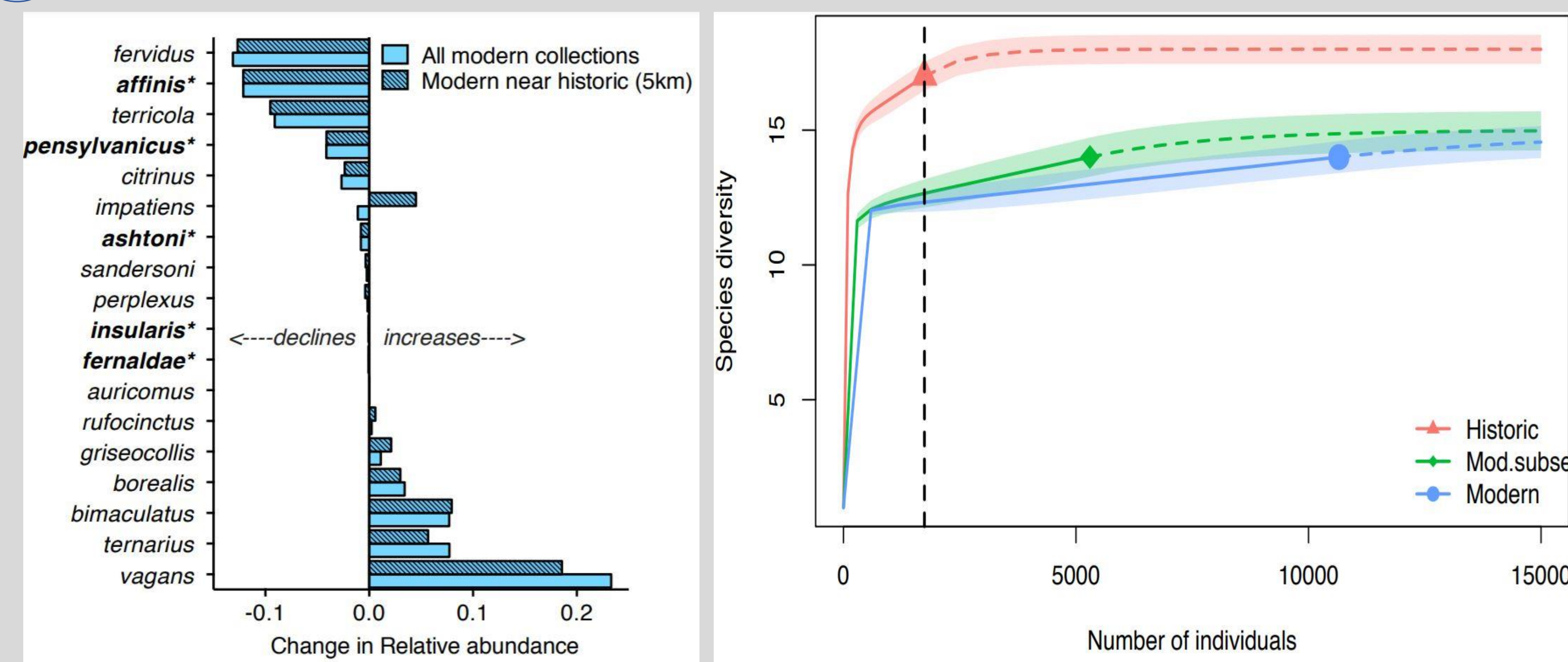


## Case Study: Vermont Bumblebee Atlas

- 1 Historic specimens from 24 public & private collections were identified and databased. We noticed a gap in our current knowledge of the status of Vermont's bumblebees, which led us to conduct surveys between 2012 - 2014.
- 2 Locations of historic (1915 - 1999) and current (2000-2014) surveys.



- 3 Changes in abundance over time

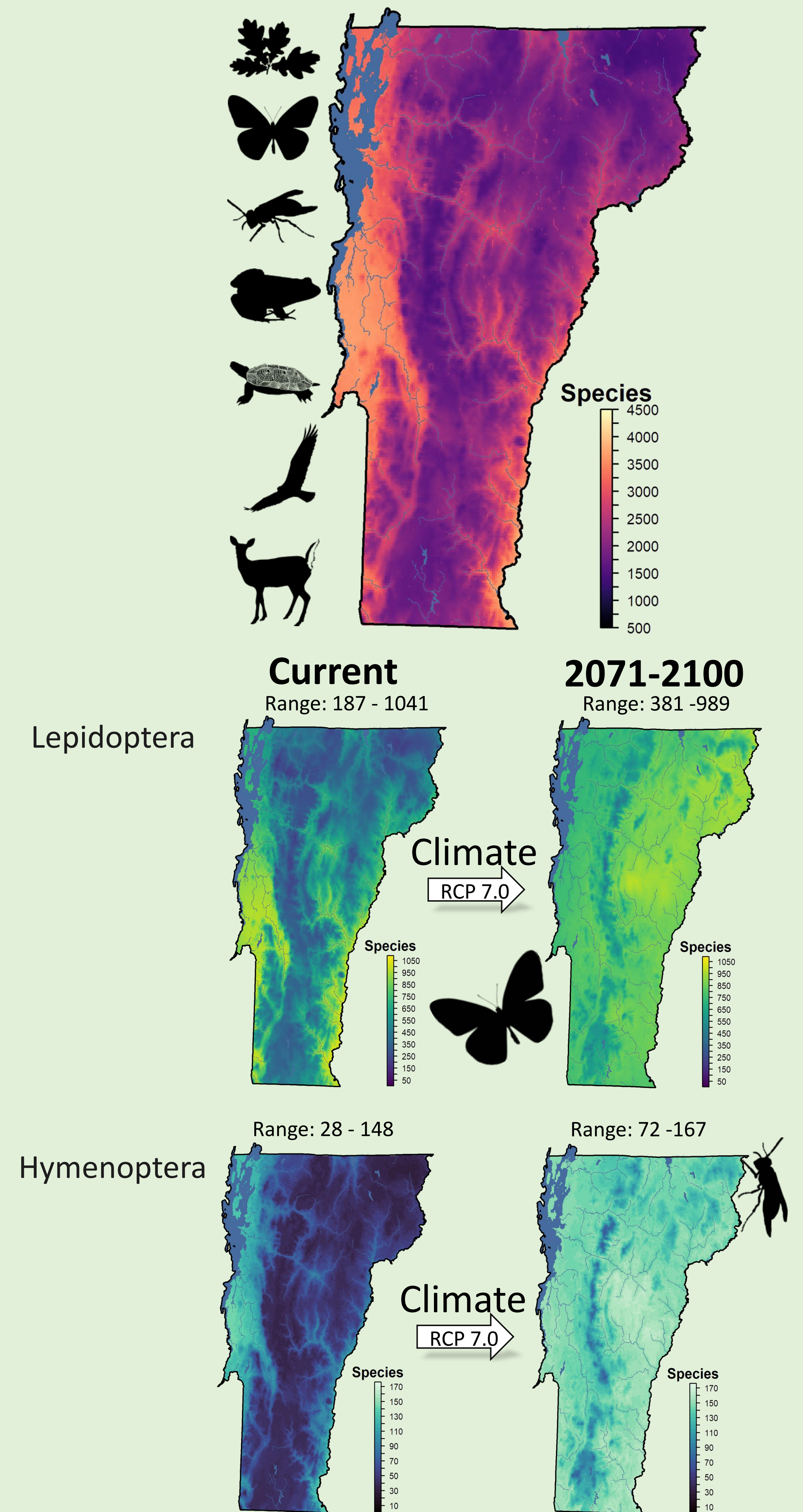


- 4 Conservation outcomes

- We recorded **17 native species**: 4 are likely extirpated, and many are declining
- Completed **endangered species status reports** for *B. affinis*, *B. ashtoni*, & *B. terricola*
- *B. affinis*, *B. ashtoni*, & *B. terricola* listed as **Threatened and Endangered** in VT
- VAL data contributed to *B. affinis* listing as **Federally Endangered**
- **Nine species** were added as **Species of Greatest Conservation Need** to the State Wildlife Action Plan.

Richardson, L. L., K.P. McFarland, S. Zahendra, and S. Hardy. 2018. Bumble bee (*Bombus*) distribution and diversity in Vermont, USA: a century of change. *Journal of Insect Conservation*. <https://doi.org/10.1007/s10841-018-0113-5>. (PDF)

## Climate Change & Biodiversity



## Why Contribute Your Datasets?

- We help make sure that your data are standardized, accessible, and do not become lost over time.
- It will help you collaborate widely with other researchers.
- It will help increase the reach of your work.
- You can track the use of your data with a Digital Object Identifier (DOI).



@vtecostudies @VTatlasoflife



<https://val.vtecostudies.org/>

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