Investigating fiddler crabs

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Introduction

This is about Atlantic marsh fiddler crab (*Minuca pugnax*) study based in the Plum Island Ecosystem LTER network (Johnson et al. 2019).

Methods

Here is an in-text citation (Horst and Brun 2023)

Field sites

The field site was in the Atlantic coast of the United States (Johnson et al. 2019).

Data analysis

We used R Core Team (2025)'s RStudio and the multiple $ packages for data analysis (Wickham et al. 2019, Firke 2024, Ushey and Wickham 2025).

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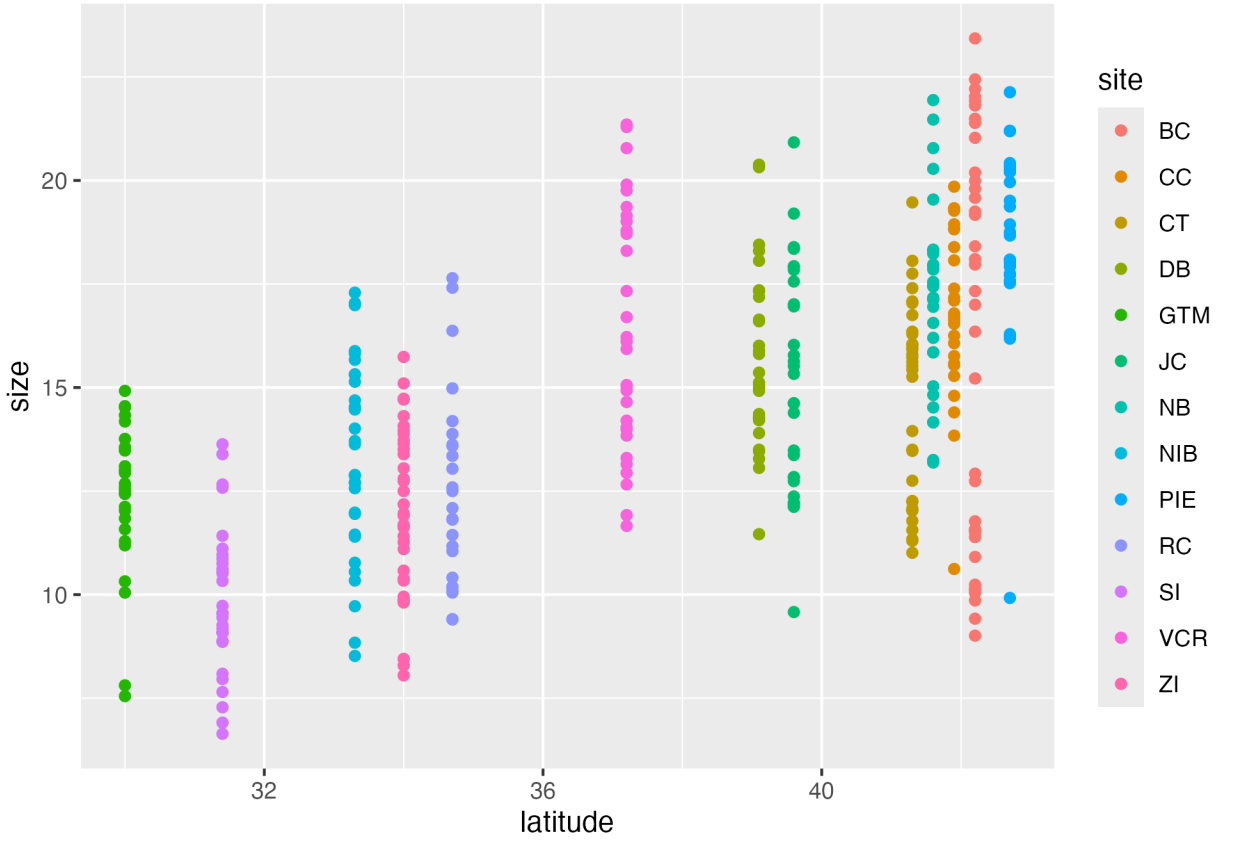
## [1] "/Users/sherrydu/Documents/Productivity and Reproducibility in E and E/Lecture 2/fiddler_crab_pr
```

Results



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Discussion

Overall, we found that as latitude increases, the size of the crabs also increases.

References

Firke, S. 2024. janitor: Simple tools for examining and cleaning dirty data.

Horst, A., and J. Brun. 2023. Lterdatasampler: Educational Dataset Examples from the Long Term Ecological Research Program.

Johnson, D. S., C. Crowley, K. Longmire, J. Nelson, B. Williams, and S. Wittyngham. 2019. The fiddler crab, *Minuca Pugnax* , follows Bergmann's rule. Ecology and Evolution 9:14489–14497.

R Core Team. 2025. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria.

Ushey, K., and H. Wickham. 2025. renv: Project environments.

Wickham, H., M. Averick, J. Bryan, W. Chang, L. D. McGowan, R. François, G. Grolemund, A. Hayes, L. Henry, J. Hester, M. Kuhn, T. L. Pedersen, E. Miller, S. M. Bache, K. Müller, J. Ooms, D. Robinson, D. P. Seidel, V. Spinu, K. Takahashi, D. Vaughan, C. Wilke, K. Woo, and H. Yutani. 2019. Welcome to the tidyverse. Journal of Open Source Software 4:1686.