# 2025 PhD Daily Log

Mao

2025-09-18

## Contents

# September 16, 2025

## Tasks for the Day

- Finish the phylo tree for mastTrait
- Bayes meeting
- Figured out the DPI problem

## Notes / Study Summary

Figured out how to make a circular tree. You can do it in the fancy way by using ggtree package, but I didn't get it working for me sadly. I used the basic plot function, just make the type to be "fan", and you can get a circular tree!

Jenna presented at the Bayes meeting today on bumble bee foraging. Her key question is that she has data collected at different time which is closely related to flora resources quality etc.. The final suggestion she got is adding a weighed term account for the proportion of data collected in certain time.

Didn't really get too deep into the DPI problem, I will try to test on a few tmr see if it worth doing the hand measuring or just redo all the scanning.

## Challenges / Questions

- Do I want to calculate the DPI, which might not be that accurate. Or re-scan everything...

## Ideas / Next Steps

- I will do some calculation on DPI for now, let's see if it works...

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# September 17, 2025

## Tasks for the Day

- Finish the phylo tree for mastTrait
- Figured out the DPI problem

## Notes / Study Summary

Made the tree with masting info for mastTrait and updated the tree for egret. Learned some new plotting techniques which I will add to my cheatsheet soon.

Ended up wfh today because I planned for lunch with Miah, I will continue with the DPI problem tmr.

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# September 18, 2025

## Tasks for the Day

- Clean the flowering time data
- Finished the first chapter of Probability
- Prepare some flash card on cone reproduction

## Notes / Study Summary

## Challenges / Questions

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## Ideas / Next Steps

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