Date of study
Winter 2014-2015 (with possibility of picking it back up).

Date of Public Archiving: March 2018 Last modified: May 24, 2016

Update 30 Nov 2023: Lizzie here, I am moving this to `NotCompleted_butArchived' folder as we have not touched it in many years.

Goal

The primary goal of this project is to assess the resource investment that our Common Garden woody species place in their buds before winter dormancy sets in. Investing in developing a bud before the winter cold may provide competitive or other fitness benefits during spring leafout. However, increased investment in bud development also constitutes increased risk of resource loss to cold damage. Investing further in structures to protect buds from temperature extremes, such as scales and pubescence, may moderate how much risk the bud is exposed to.

The bud set project may feed into the Common Garden project by providing information about plant bud traits that will help us to quantify the role of risks and investments as forces shaping plant phenology.

Contributors

Lizzie Wolkovich, lizzie@oeb.harvard.edu Jehane Samaha, <u>jehane.samaha@gmail.com</u>, 617-571-6670 Dan Buonaiuto, dbuonaiuto@g.harvard.edu *General Files*

| File | Where | What |
|--|---|--|
| BUDSET_protocols.pdf | W: drive > WeldShare > Wolkovich Lab > com mongarden >Bud Set Project Winter 2015 | Goals, project development brainstorm, protocols |
| Jehane_Bud Set_NEBC_research talk.pptx | W: drive > WeldShare > Wolkovich Lab > com mongarden >Bud Set Project Winter 2015 | A powerpoint given at the Spring 2015 NEBC conference by Jehane. |
| Bud Set Project Metadata.rtf | W: drive > WeldShare > Wolkovich Lab > com mongarden >Bud Set Project | Similar info to this sheet, about where datacode live. |

| Winter 2015 | |
|--------------|--|
| William 2010 | |

Data and Code

| File | Where | What |
|---|---|---|
| BUDSET_Dissection_Data- March 2016 download.xlsx | W: drive > WeldShare > Wolkovich Lab > com mongarden >Bud Set Project Winter 2015 | Measurements of Buds, including metadata. |
| buds_volume.R | W: drive > WeldShare > Wolkovich Lab > com mongarden >Bud Set Project Winter 2015 | Calculating the sizes of winter buds, etc., using a formula for volume rather than area. This is the more updated file. |
| buds.R | W: drive > WeldShare > Wolkovich Lab > com mongarden >Bud Set Project Winter 2015 | Calculating the sizes of winter buds, etc. |
| buds_hysteranthy.R | W: drive > WeldShare > Wolkovich Lab > com mongarden >Bud Set Project Winter 2015 | Checking for relationship between budsize any hysteranthy |

Possible extras:

Be sure all your data is somewhere where it is backed up as per the data management plan.

Check this file for accuracy, and update as needed, every 6 months or sooner.

