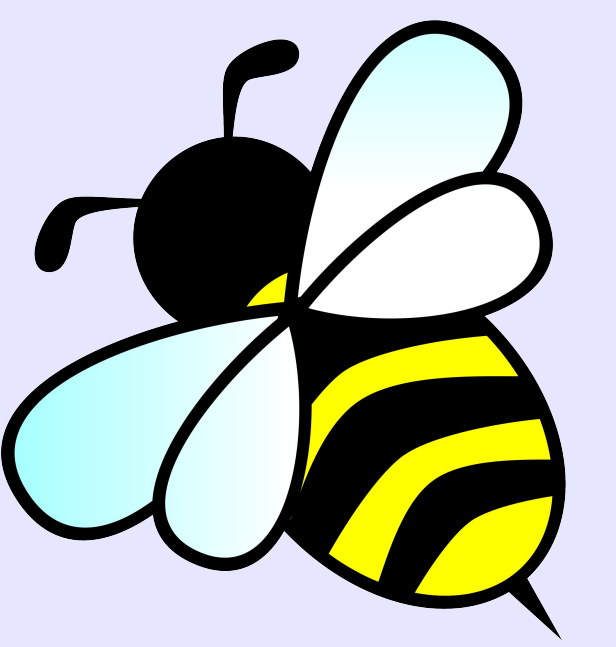




Effectiveness of pollinator enhancement in Portland community orchards aka Pollinators Count!

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Community Partner

Portland Fruit Tree Project's mission is to increase equitable access to healthful food and strengthen communities by empowering neighbors to share in the harvest and care of city-grown produce.

Project Accomplishments By the Numbers

- 15 Volunteers engaged in field observations
- 25 Training attendees
- 6 months of monitoring effort
- 5 orchards
- 101 orchard observations
- 567 pollinator observations

Hypotheses

1. A greater number and variety of pollinator enhancement plants will increase the richness and abundance of local pollinators at the orchard sites
2. Pollinators will have a preference for native plants
3. Presence of nearby habitat remnant will have a positive impact on pollinator richness
4. A larger abundance of insect pollinators will correlate with greater fruit production

Study Design

Study Area

- 5 community orchards within the City of Portland

Monitoring

- Community science volunteer data collection
- Transect walk for 10 minutes once per week
- April 2017-September 2017

Identification

- *Morphospecies* identification according to Xerces Citizen Science Protocol
- Photographic verification

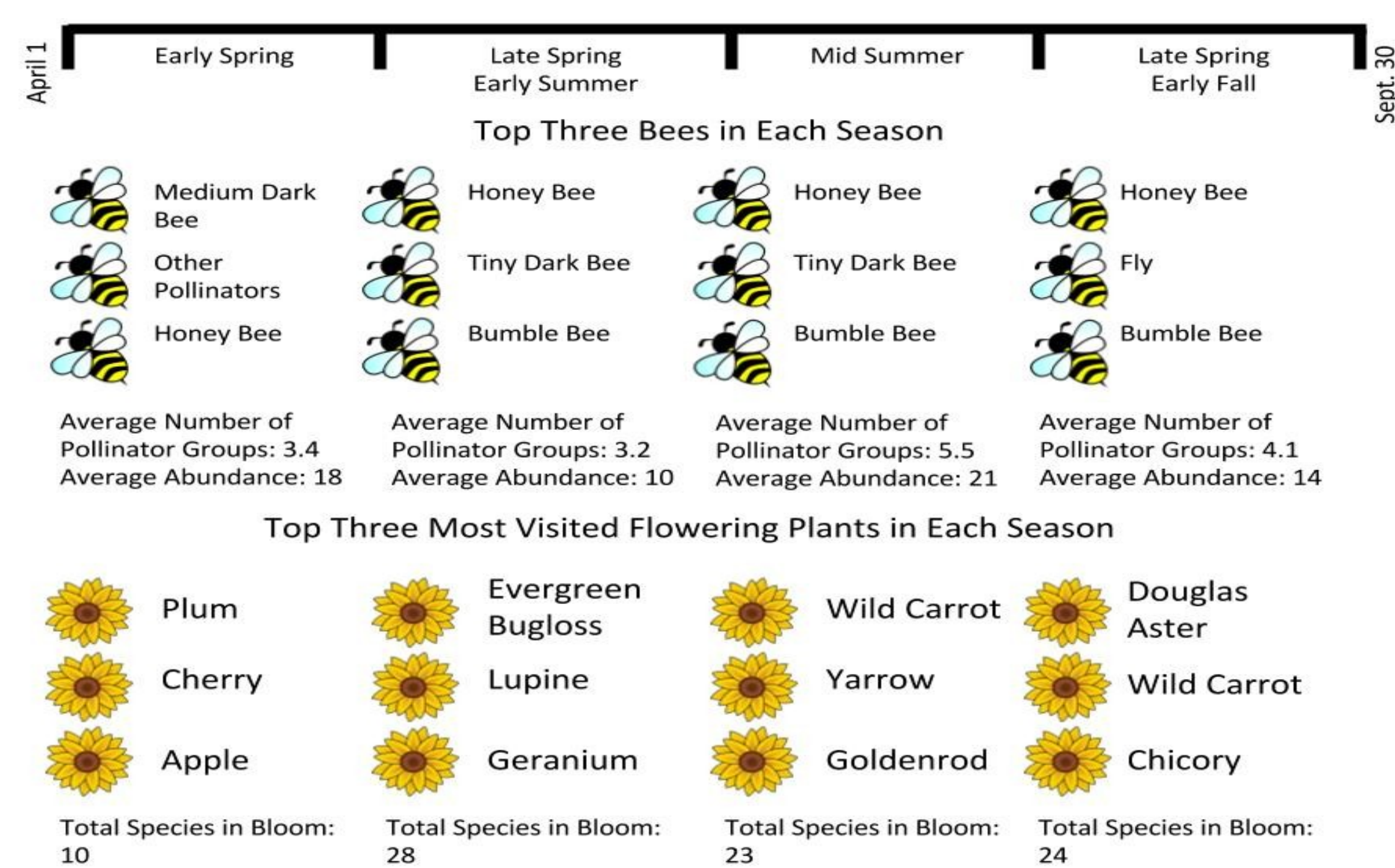


Figure 3. Top bees and plants observed in each part of the year.

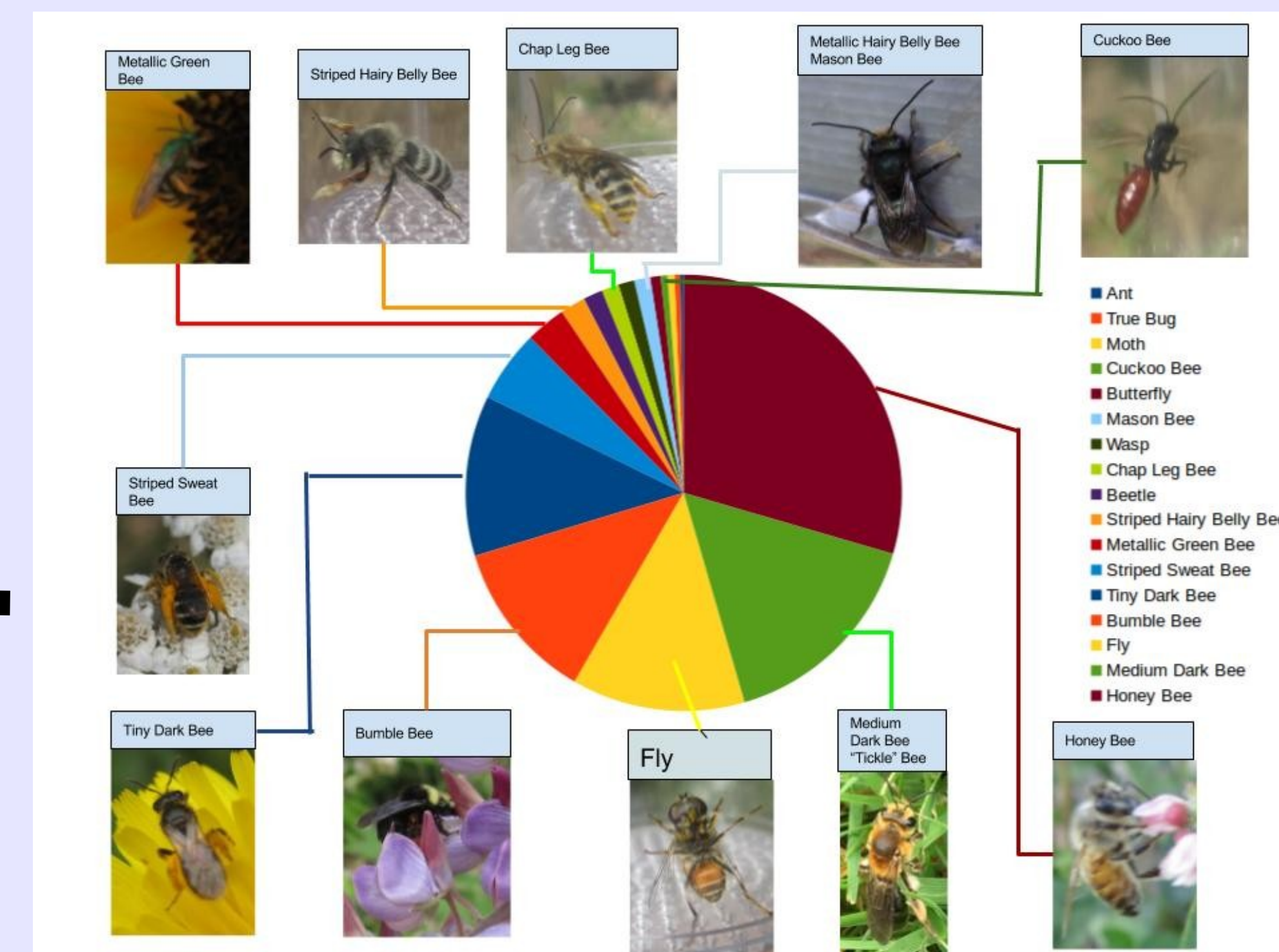


Figure 1. Bee group distribution over the season.

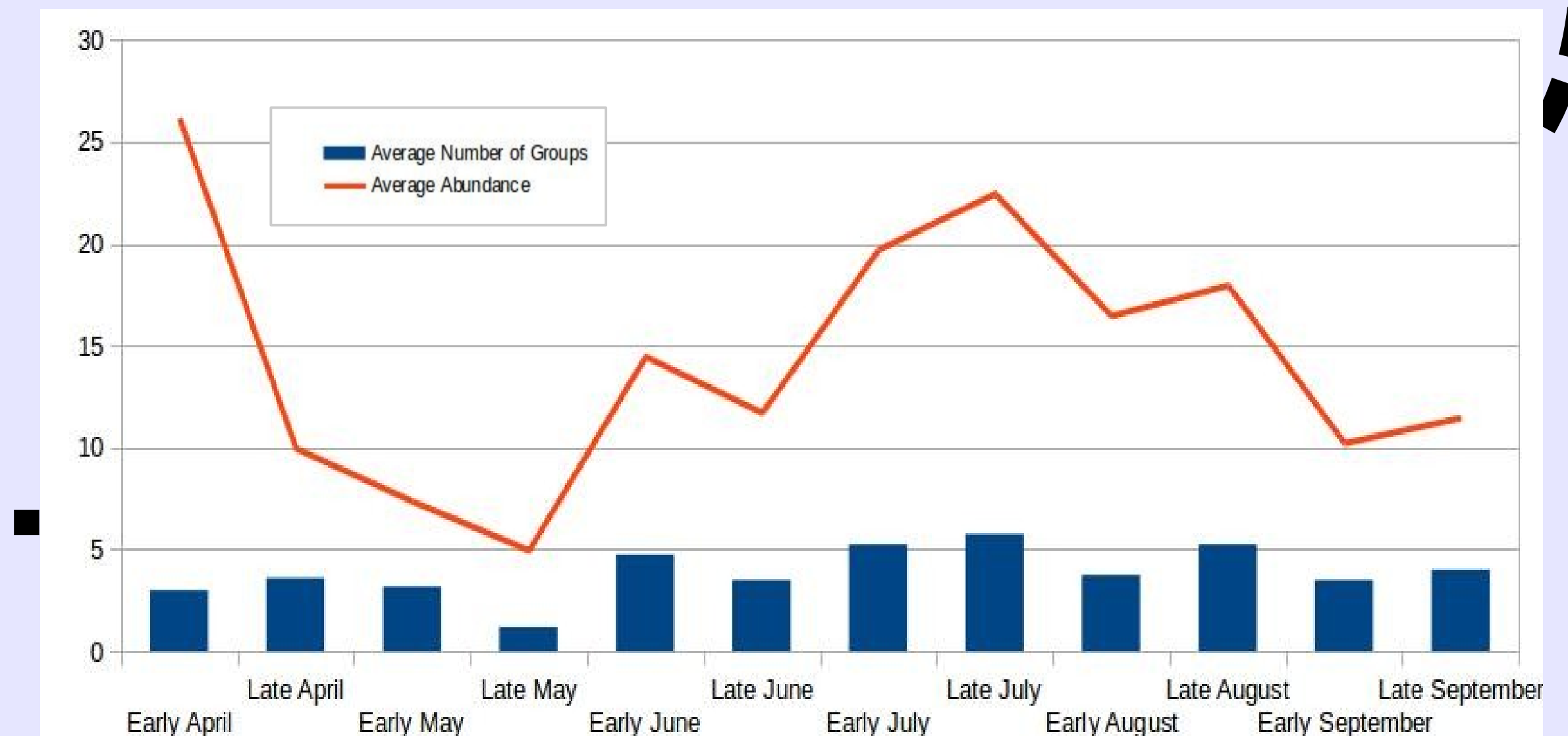


Figure 2. Pollinator diversity (blue bars) and pollinator abundance over the growing season.

Meet a pollinator

Andrena (Medium Dark Bee)
Common Name: Mining Bee or Tickle Bee
Nesting: Ground often in large aggregations
Emergence: Early spring or summer
Appearance: About 1/2 inch slender, dull black bodies with buff hairs on thorax.



Andrena spp. "Tickle Bee" on a currant

Takeaways

- Found each of the 10 morpho-groups in the orchards as a whole
- Orchards with the greater floral diversity also had the greatest pollinator diversity and abundance
- Flowering weeds were among the most visited flowers suggesting they are significant resources for urban pollinators
- The bee genus *Andrena* was observed on fruit blossoms more than any other bee including honey bees

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