

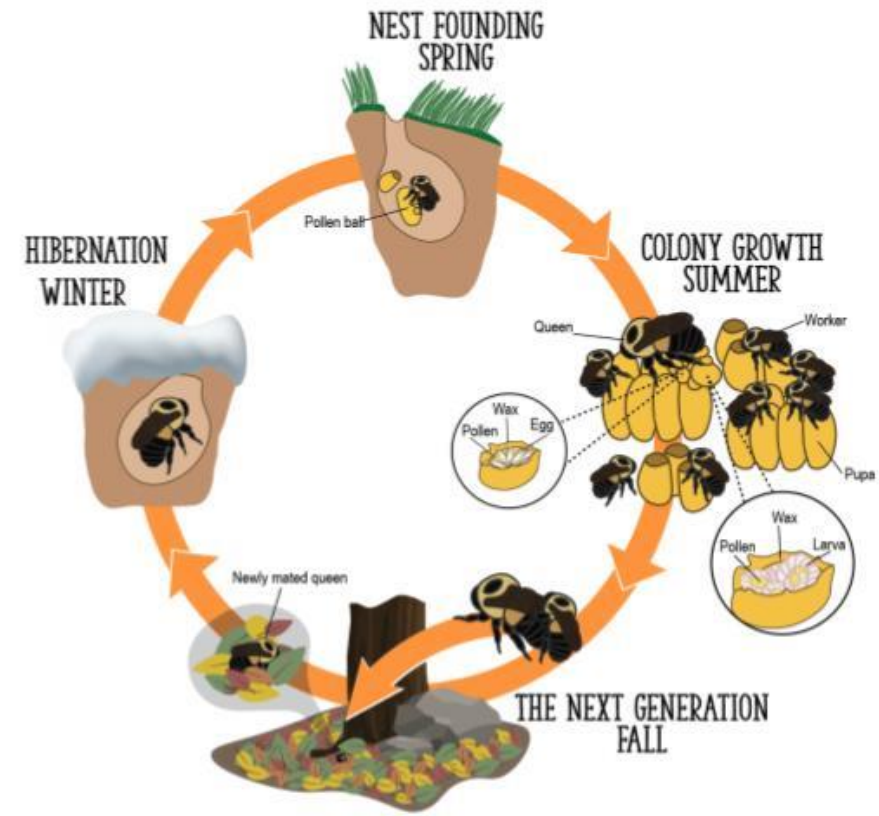
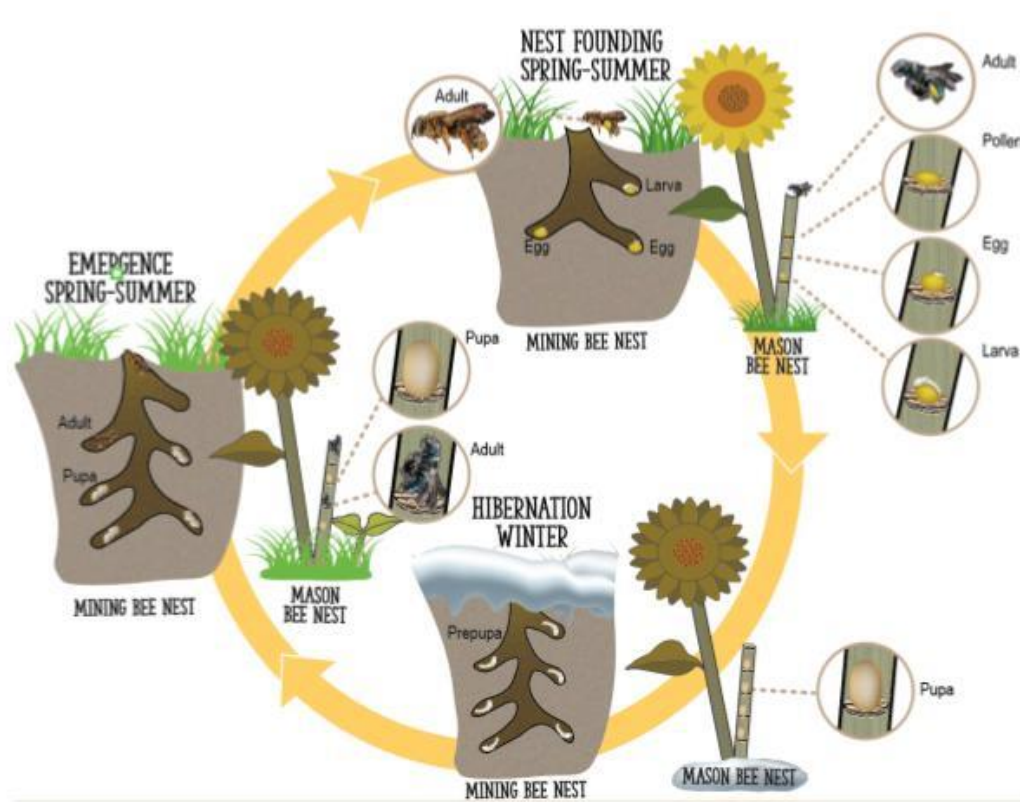


Fall and Winter in the Pollinator Garden

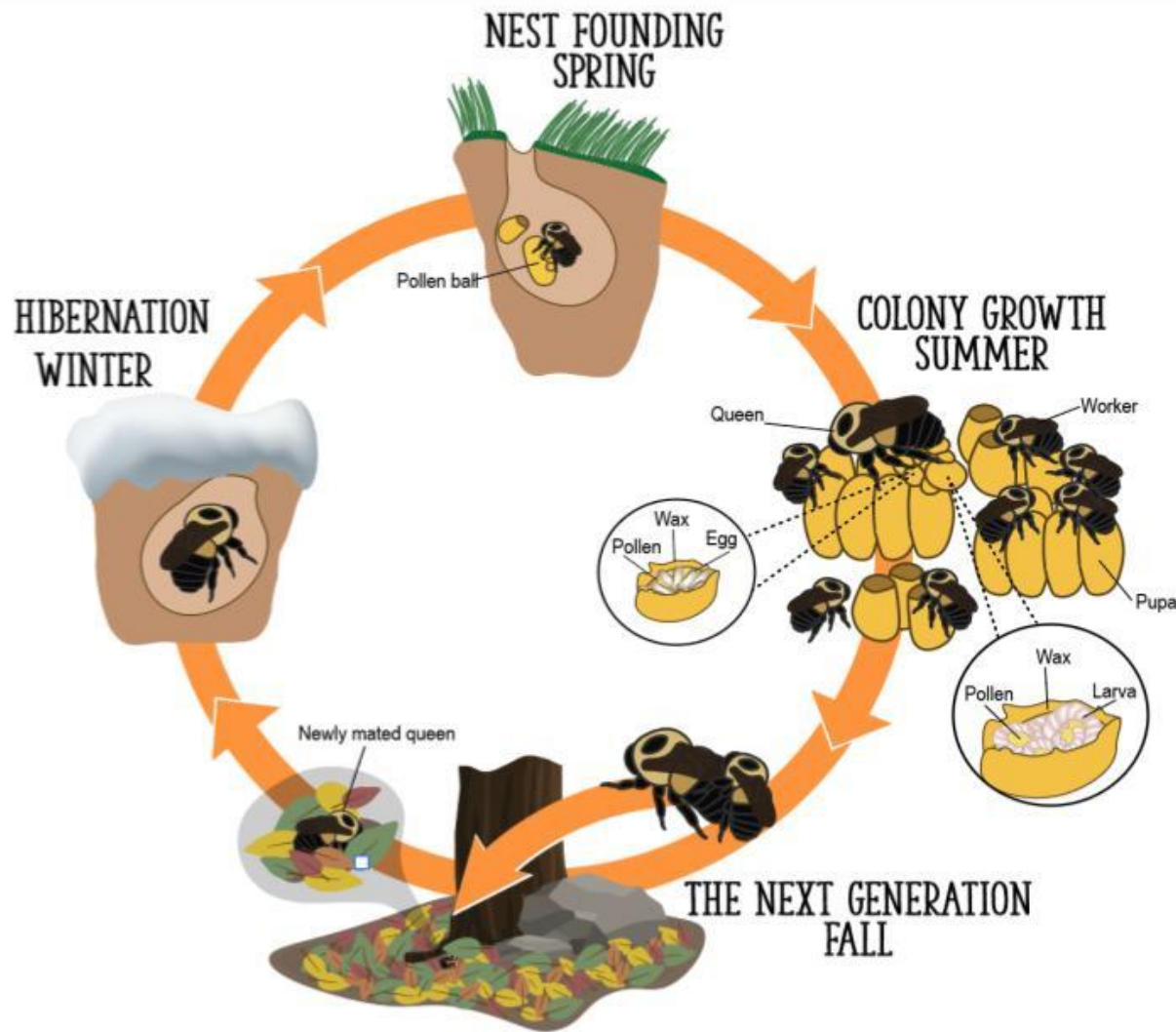
Thea Evans
Pollinator Garden Coordinator
UMN Bee Lab

UNIVERSITY OF MINNESOTA EXTENSION

A BEE NEST ROUND THE YEAR



ANNUAL CYCLE OF SOCIAL BEES



The mother bee (queen)

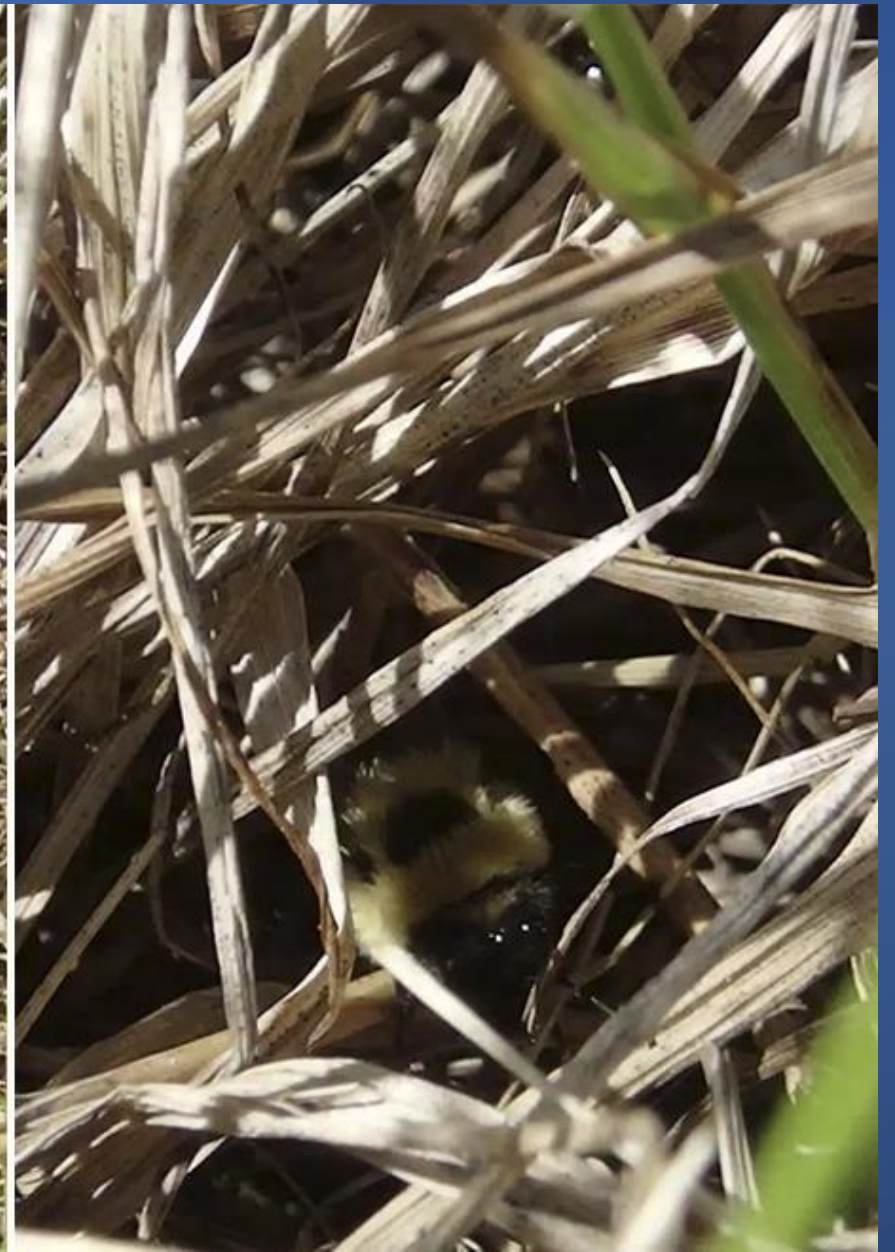
- stays in nest
- cooperates with daughters or sisters
- raises many young bees

Common social bees include bumble bees, honey bees, some sweat bees, carpenter bees, and small carpenter bees.



Fall Flowers

Grass thatch



THE NEXT GENERATION FALL

- New queens and males leave nest
- Find mates from other nests
- Newly mated queens search for a place to spend the winter, usually digging themselves into ground



HIBERNATION WINTER



HIBERNATION WINTER

Most social bees

- only new queens survive

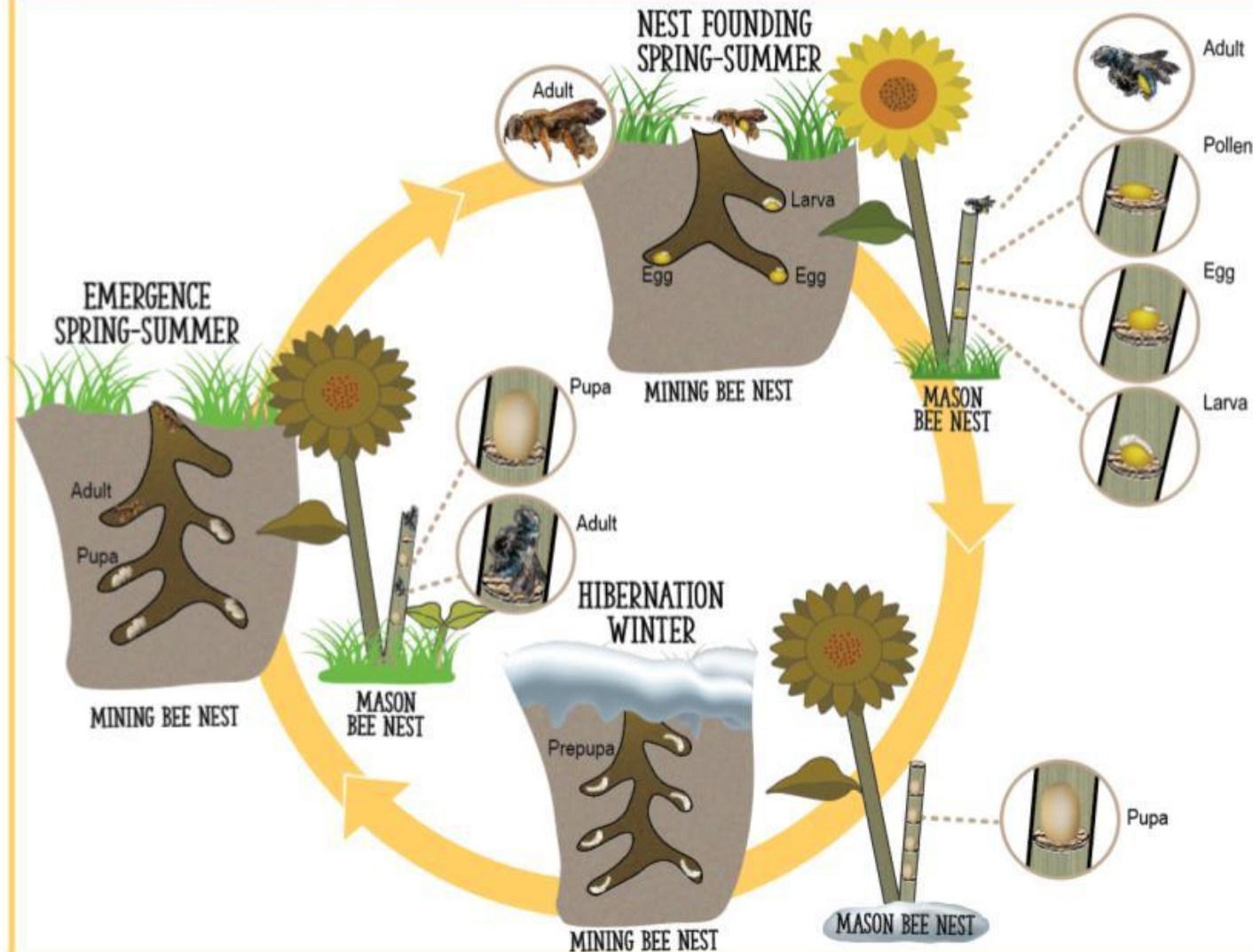
Honey bee colonies

- queen & workers survive winter together in nest

Leave the Leaves!



ANNUAL CYCLE OF SOLITARY BEES



Mother bee

- makes nest
- gathers food
- lays eggs

Baby bees grow on their own

Mining, leafcutter, long-horned, and mason bees.

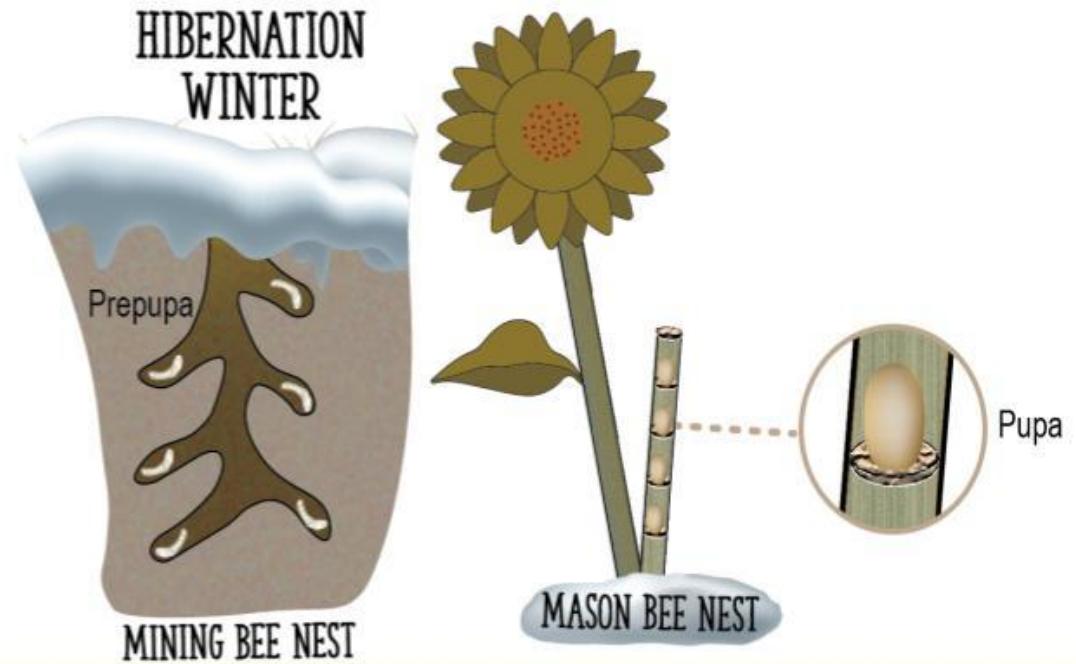


Photo by Don Leao

HIBERNATION WINTER

Next generation of bees in nest

- prepupae
- pupae (sometimes in cocoons)
- adults



Bare Soil

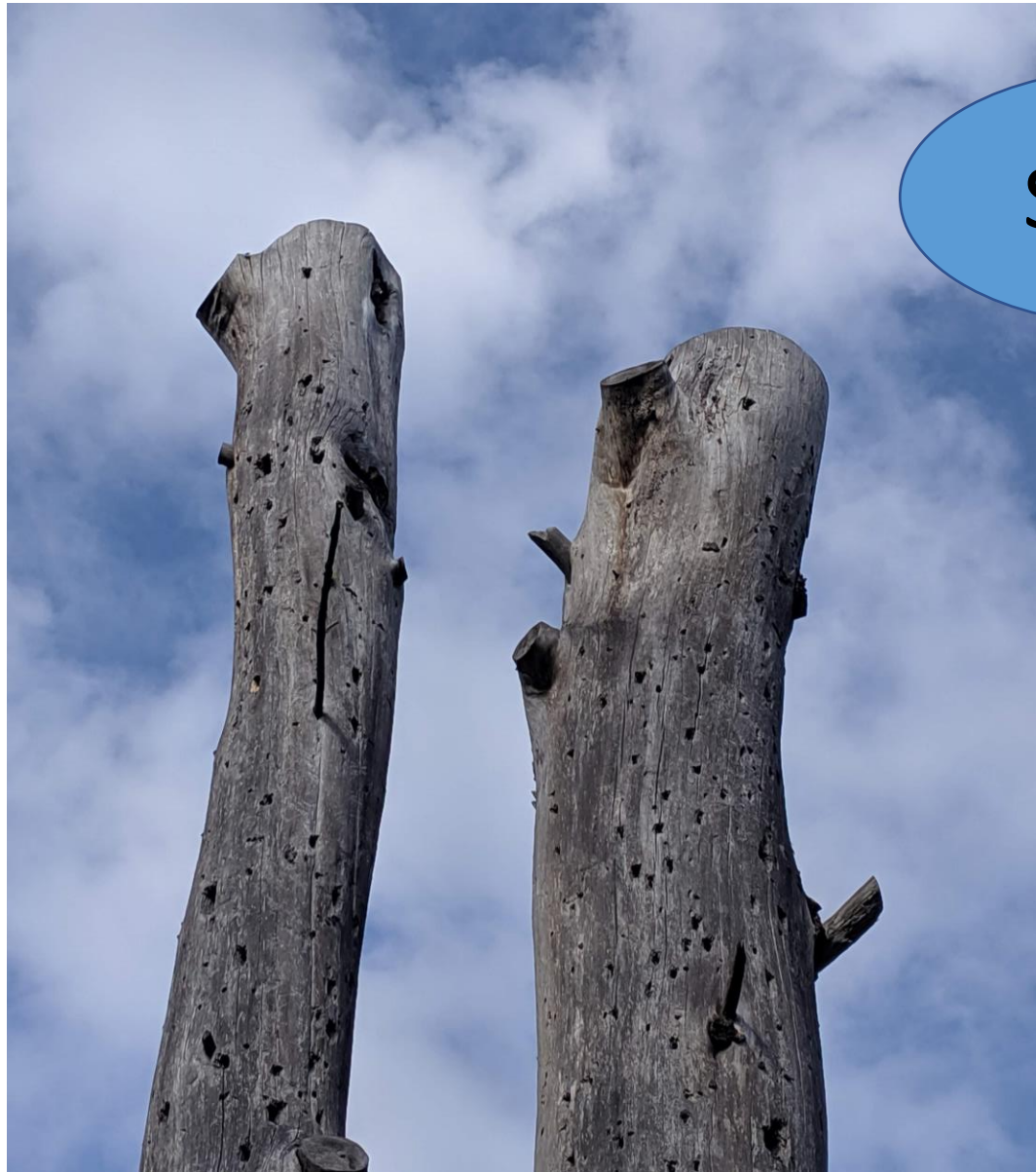





Cut stems



Snags





Aromatic aster
Symphyotrichum
oblongifolium
blooms late summer

Thank You!

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