



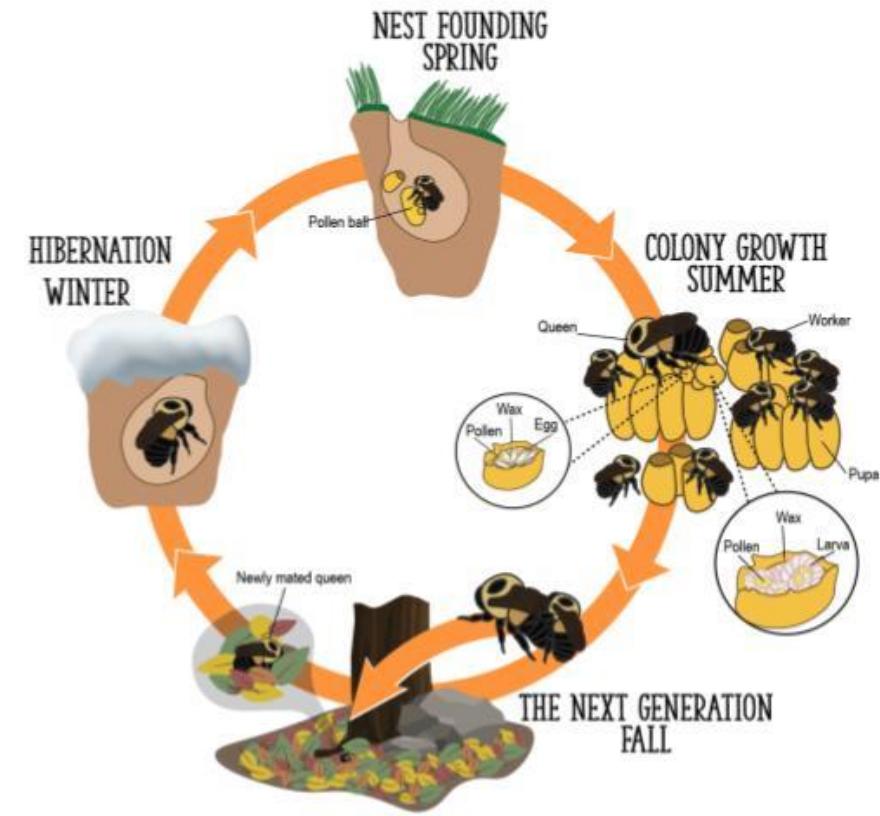
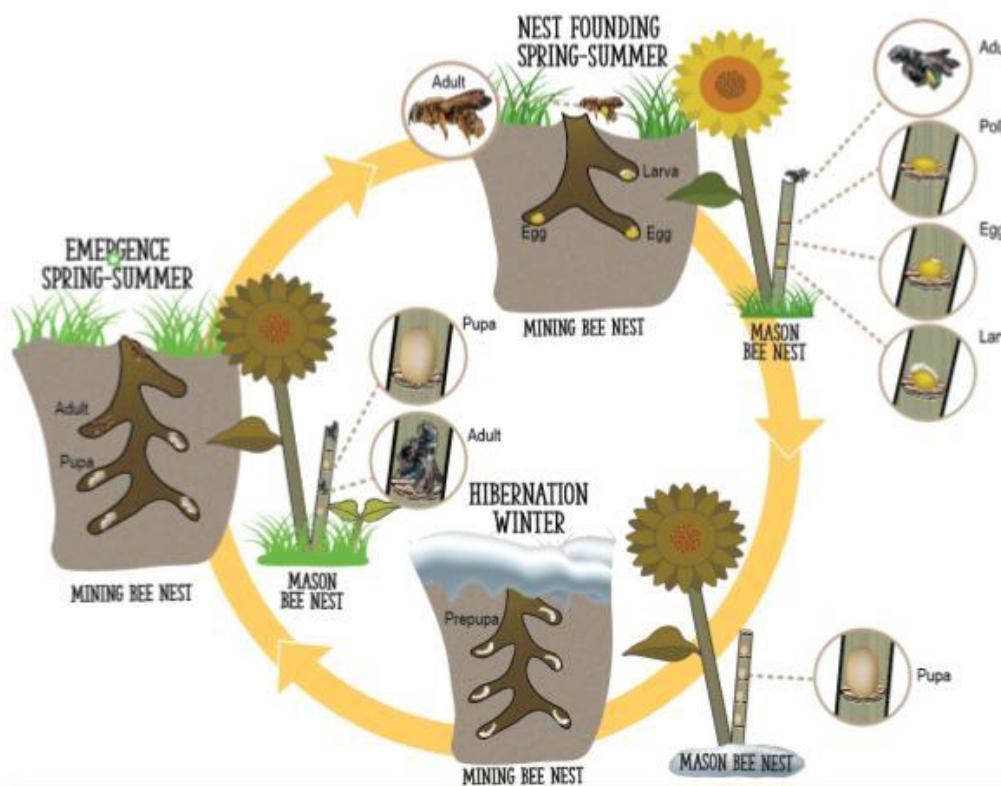
A circular blue overlay is centered on the image, containing the title text. The background shows frost-covered, dried plant stems against a clear blue sky.

Fall and Winter in the Pollinator Garden

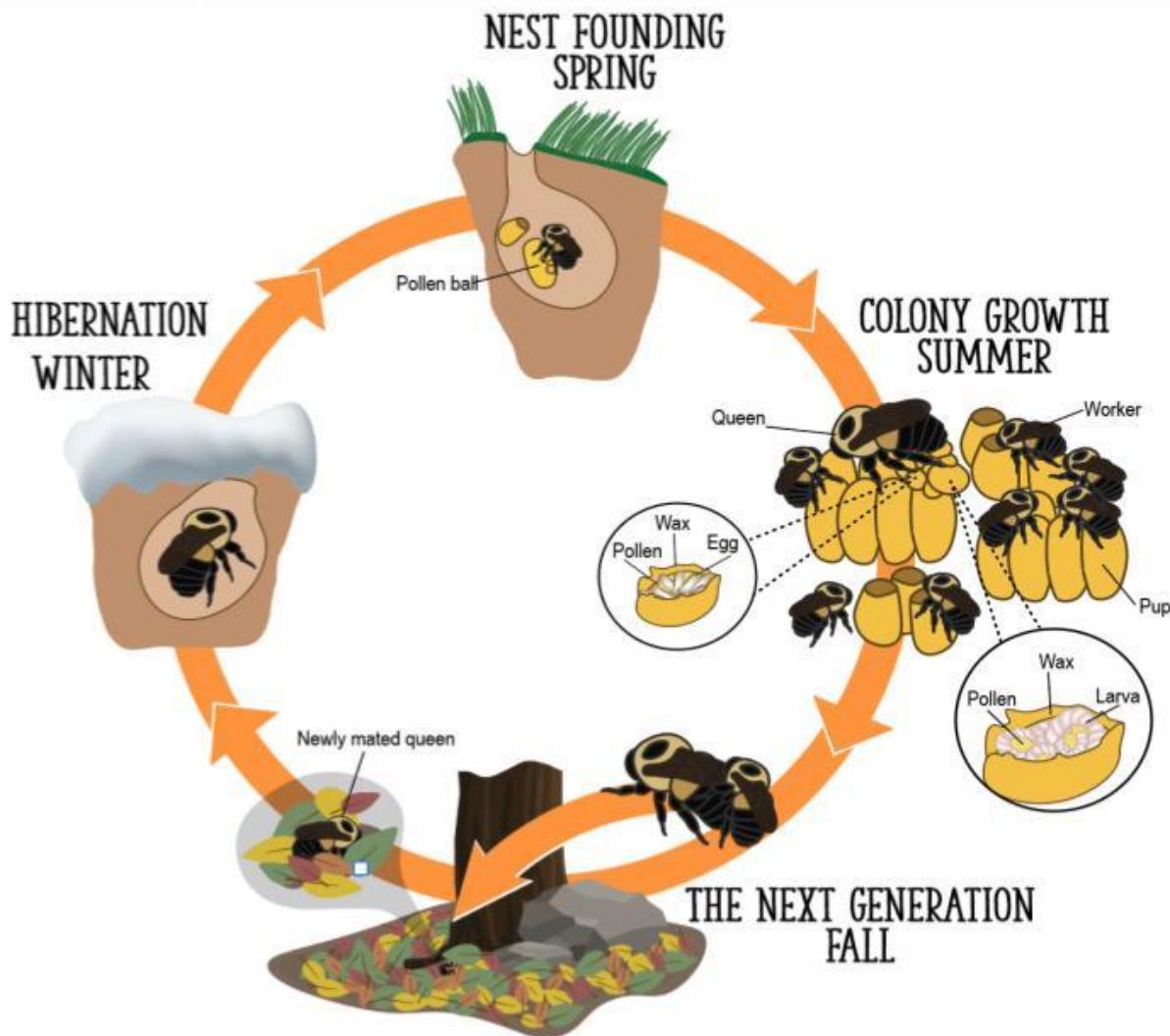
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Pollinator Garden Coordinator
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UNIVERSITY OF MINNESOTA EXTENSION

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.



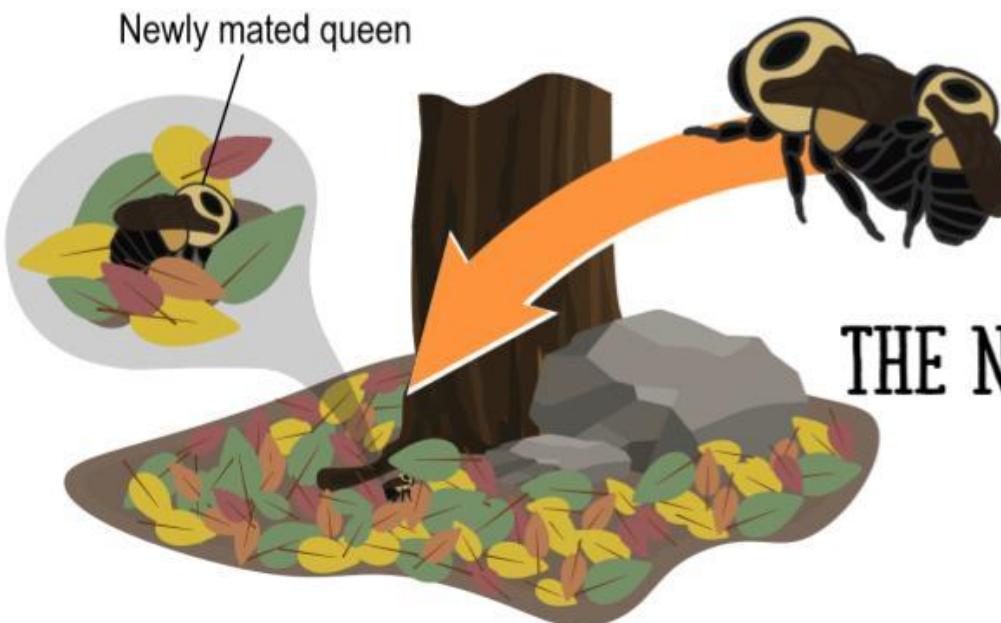
Fall Flowers



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



THE NEXT GENERATION
FALL

HIBERNATION WINTER



HIBERNATION WINTER

Most social bees

- only new queens survive

Honey bee colonies

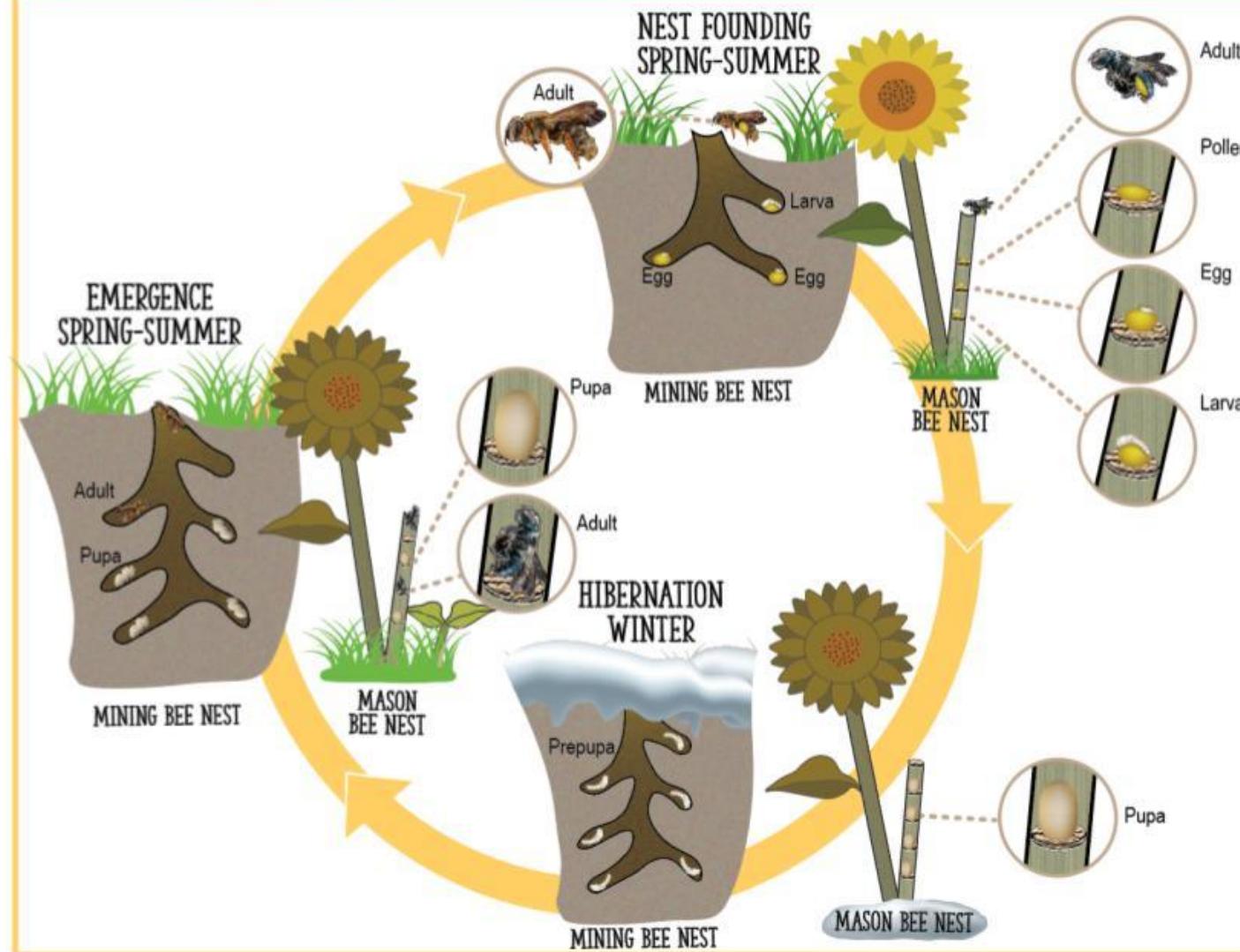
- queen & workers survive winter together in nest



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.

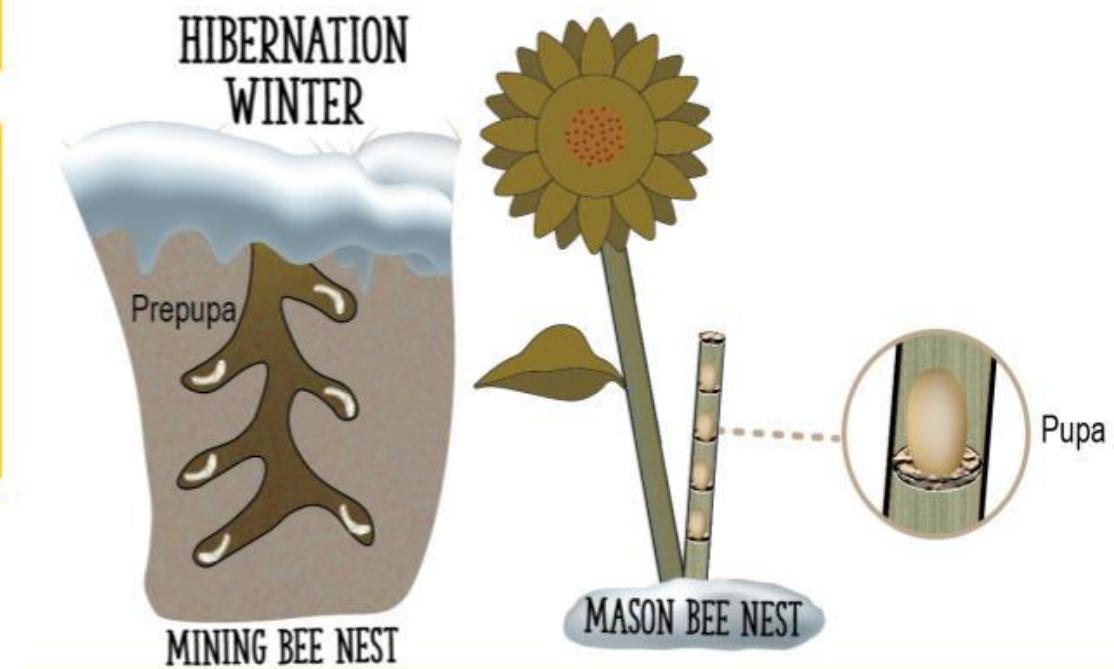


Photo by Don Leaon

HIBERNATION WINTER

Next generation of bees in nest

- prepupae
- pupae (sometimes in cocoons)
- adults





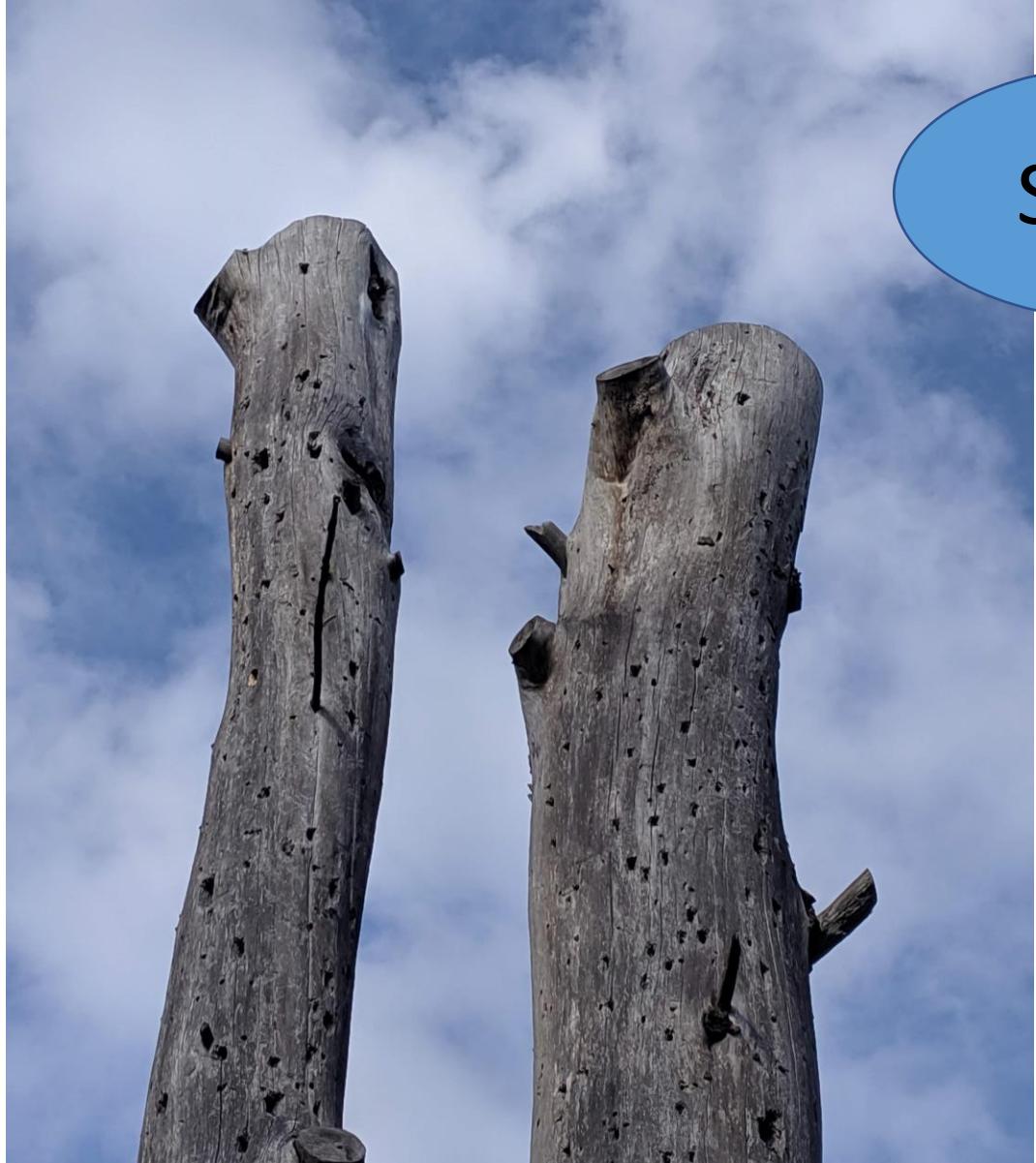
Bare Soil





Cut stems





Snags





Thank You!

beelab.umn.edu

Aromatic aster
Sympphyotrichum
oblongifolium
blooms late summer