

Mason Bees: Vital Pollinators For Garden Success

[Enter Your Name], BeeGAP Speaker

[Enter Venue Name]



Power of Your Yard to
Protect the Food Supply



[Enter Your Logo
or Company
Name]

In Partnership with


Crown Bees[™]
Your Complete Mason Bee Resource

 **Bee
GAP**
Gardeners Adding Pollinators

BeeGAP SPEAKER

[Enter Your Logo or Company
Name or Affiliation]



About [Enter your Name]

- Your credentials, expertise and/or affiliation
- Etc. Dedicated to...
- Etc. Promotes.....
- Etc.
- Etc.
- Add your weblink www.XXXXXX

BeeGAP PARTNERSHIP



About Crown Bees

- Leading mason bee education & pollination company
- Markets gentle mason bees and bee products
- Develops and field tests bee-safe products
- Member of Orchard Bee Association
- Advisor to scientific researchers
- Partner with National Garden Clubs, Inc. (NGC)
- Products sold in the USA, Canada, and Europe.
- Visit www.crownbees.com

WHAT'S THE BUZZ ABOUT BEES?

Food
Production



Seeds for
Food



Plus
Flowers!



Bees pollinate
1/3 of our
food supply



And 1/3 of crops
to feed our meat
sources

THE HONEY BEE BUZZ

- ❖ **Sole Reliance for Crops, Orchards**
- ❖ **Decline Debate**

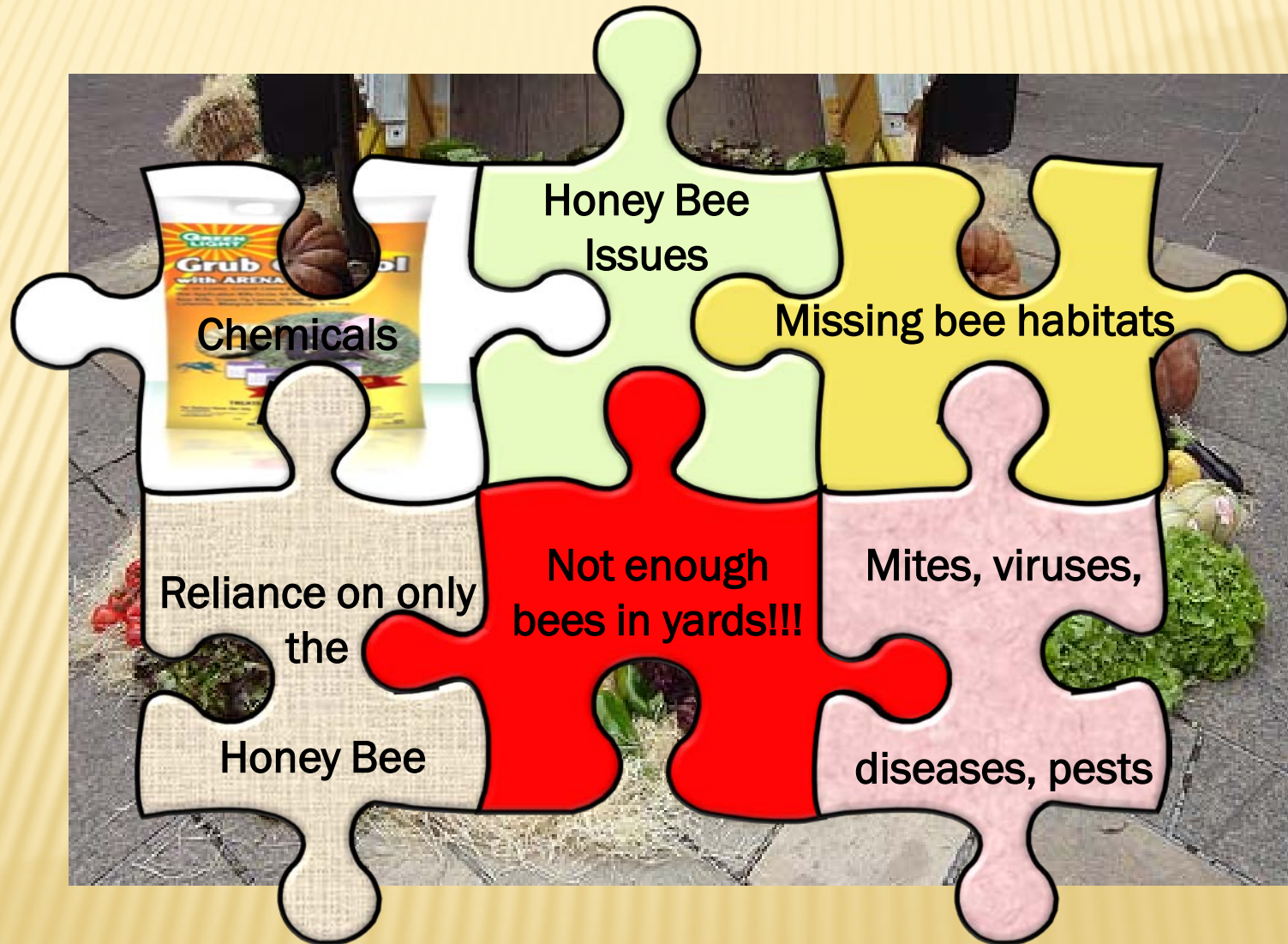


Mono-Pollination (honey bee) puts food supply at risk

Multi-Pollination (mason bees & other types)
protects food supply



THE POLLINATOR PUZZLE



WE NEED MORE BEES!

While researchers search for honey bee answers...

**There is a Powerful
Pollination Solution!**



THE POWER OF YOUR YARD

Increase our Mason Bee Population



Create Natural, Edible Landscapes

Add Efficient Mason Bees for Pollination

Nature Knows Best!

Bees thrive in eco-balanced landscapes

- Blend natural or native plants within lawn
- Use natural or organic fertilizer
- Add native and non-invasive flowers
- Encourage beneficial insects -pest control
- Add bee habitats

Every yard makes a difference!

BEE FOOD IN YOUR YARD

- Plant pollen/nectar flowers~bloom first to last frost
- Add herbs, fruit trees, nuts, veggies, annual/perennial
- Cluster flowers, about 3' x 3': pretty, easy pollination
- Limit hybrids and double blossoms~little pollen for bees



**Blossoms
store bee
nutrition**



NATURE'S PEST MANAGEMENT

Add/Protect Beneficial Insects



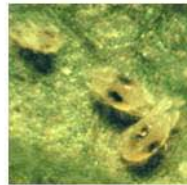
Natural way to control garden pests



Lady bugs



Lacewing



Spider mite
destroyer



Spined
soldier bug



Thrips
predator

Avoid broad spectrum insecticides

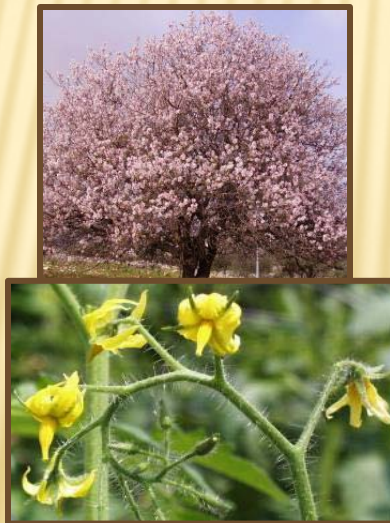
- Kills all bees and beneficial insects
- Creates an unbalanced garden ecology
- Yards need *some* pests, which are food for beneficial insects



CREATE A BEE HAVEN

The Power of **ONE** for Your Garden

1. Add **ONE** native flowering plant to your yard
2. Grow **ONE** piece of food ~ a fruit tree or tomato
3. Safely dispose of **ONE** chemical from your shelf
4. Set up **ONE** mason bee house in your/friend's yard



WHICH BEES FOR YOUR GARDEN SUCCESS?



Social

- Honey bees
 - Bumble bees
 - Hornets/wasps
-
- One hive-one queen
 - Hive communicates
 - Aggressive, hard to raise

Solitary

- Mason bees
 - Leafcutter bees
 - Mud dauber wasps
-
- Each female is a queen
 - No communication
 - Gentle, easy to raise



Only honey bees produce honey

MANY BEES, DIVERSE HOMES

● 30% nest in hives
(social)



Honey Bees



Hornets



Paper Wasps

● 40% nest in holes (solitary)



Aglaia



Mason Bee



Leafcutter



Mud Dauber

● 30% nest in ground
(social & solitary)



Bumblebee



Digger Bee



Alkaline Bee

MASON BEES FOR YOUR YARD

- Mason bees pollinate spring fruits, plants
- Leafcutters pollinate summer fruits, veggies
- You'll likely find other seasonal bees and other struggling wildlife attracted to your edible garden and bee habitat



**Mason Bees are
Excellent Pollinators
Gentle & Easy to Raise**



FRUIT TREE POLLINATION

In an orchard, how many bees are needed to pollinate a tree?

6 Mason
Bees



360
Honey
Bees



MASON BEE POLLINATION

RESULTS



**100 mason bees
produce
4 bins of
cherries**

1 mason bee =
12 lbs of cherries
vs. **60** honey bees

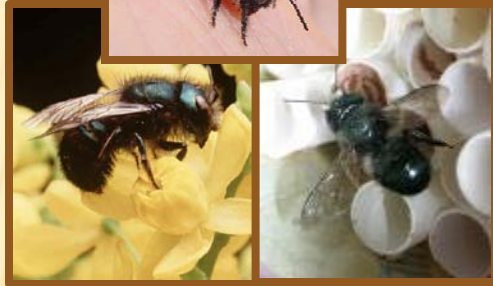


Handful of
females
pollinates
1 acre or
**~6 tons of
cherries!**

MASON BEE LIFE CYCLE



Late
March



April - May



June



July - Aug



Sept - March



MASON BEE ESSENTIALS

- Nutritious pollen-filled food
- Cocoon Nest Building Material
- Safe nesting holes
- Protective home
- Harvesting for bee thriving
- Winter storing for next season



**Helping Our Bees Thrive,
Not Just Survive!**

MASON BEE FOOD

Nutritious Bee Food

- ❑ Almost any flower; seasonal fruit, veggies
- ❑ Pollen within 300 ft. (100m) of hole



VITAL NEST BUILDING MATERIAL

Spring
Mason Bee



Mud to enclose and protect each cocoon



***Clayey mud,
not sand or loam***



**Small amount of mud
within 20 ft-50 ft of nest**



This is the #1 reason for failure! No good mud, no bees!

VITAL NEST BUILDING MATERIAL

Summer
Leafcutter



Leaf bits to enclose and protect each cocoon



The small oval
cuts do not harm
plant leaves



TYPES OF NESTING HOLES

A Nesting Hole

- + Hole/straw/reed ~5/16" and ~6" long.
- + Other holes in same area. Each female, if she chooses to nest, fills about two holes in her lifetime.



Drilled wood:
no insert



Reeds



EasyTear Tubes



Inserts & Tubes



Wood trays



No plastic

MASON BEE HOME


Shelter for Nest Tubes/Reeds

- ❑ A “house” keeps nesting holes dry
- ❑ On a wall, under an overhang, about head high



MASON BEE HARVESTING

Why Harvest Cocoons?

- Ensures healthy bee development
- Rescues cocoons from pests 
- Helps plan your bee needs for next season
- Simple maintenance for your colony

***Your colony thrives ;
Your bee population grows!***



STORE MASON BEE COCOONS

Why Store Your Cocoons?

- Overwinter your cocoons in the refrigerator
- Bees healthier in steady, near-freezing temperatures
- Frost free refrigerators dehydrate; kill mason bees
- Store in HumidiBee or similar device to maintain hydration
- Wake 'em to pollinate!



Safe **zzzzz**
Hibernation 6-7 mos.



SEASONAL CALENDAR

Spring Mason Bee

WINTER	SPRING	SUMMER	FALL
Inventory stored cocoons; buy more, as needed. Store in fridge.	Put 1/3 of spring cocoons out every 2 weeks.	Protect filled tubes: place new, empty tubes.	Harvest and store cocoons in fridge. They'll hibernate until spring.

Sign up for Bee-Mail! Crown Bees will remind you when to do what!



Summer Leafcutter

WINTER	SPRING	SUMMER	FALL
Harvest and store cocoons in fridge. They'll hibernate until summer.	Inventory stored cocoons; buy more, as needed. Store in fridge.	Set out half of the cocoons. Place the other half out ~ a month later.	Store cocoons in fridge.

MASON BEES COSTS

- ❑ **Mason bee setup cost ~\$50**
- ❑ **1-2 hours of your time each year**
 - Put out cocoons and house ~ 15 minutes
 - Watch busy bees fill holes ~ time is up to you
 - Harvest and store cocoons ~ 30 minutes



MASON BEE DETAILS

Get Tips, Information & Expertise

- ❑ Visit www.crownbees.com: Definitive resource for mason bee information
 - Videos, pictures, bee info
 - How-to guides and successes
- ❑ Get monthly **Bee-Mail**: Reminds you “when to do what”



Bees Are
Vital for
Healthy
Gardens

THE BEEGAP SOLUTION

Send excess mason bees to local farmers. Supplement honey bees for crop pollination.

**Bee
Gardeners
Adding
Pollinators**

Protect our Food Supply with More Bee Pollinators


Crown Bees™


**B e e
G A P**
Gardeners Adding Pollinators

HOW BEEGAP WORKS



Gardener

- Raises mason bees
- Shares cocoons
- Sends excess bees to **BeeGAP**



Farmer

- Pollinates with **BeeGAP** bees
- Supplements honey bees
- Changes from mono to multi-pollination of food supply



GET INVOLVED!

6 Easy Steps

1. Learn more at www.crownbees.com
2. While there, sign up for Bee-Mail
3. Plant an Edible Landscape
4. Create a Bee Haven
5. Participate in BeeGAP





SPECIAL THANKS

Bee Data and Information

USDA ARS/Logan Bee Lab

Orchard Bee Association

Crown Bees field trials

Presentation Contributions

Debbie Skow, NGC NativeBee/BeeGAP Chairman, Washington

Carole Sevilla Brown, Author of [Ecosystem Gardening](#); Managing Editor
[Beautiful Wildlife Garden](#) and [Native Plants and Wildlife Gardens](#), PA

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Missy Anderson, Mason Bee Presenter & Renter, Washington

Gordon Cyr, OBA VP, British Columbia

Richard Little, Ret. Entomologist, Master Gardener, Oregon

QUESTIONS & COMMENTS



More About Mason Bees
www.crownbees.com



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or Company
Name]

