

A photograph of a snowy forest. In the foreground, four beehives are visible, each covered in a layer of snow. The background consists of many trees, their branches heavily laden with snow, creating a dense, white winter scene. The lighting is soft and diffused, typical of an overcast winter day.

GOING NORTH: COLONY REARING FOR SURVIVAL

by Mel Disselkoen

**Indiana Beekeepers Association
Annual Fall Conference
November 6-7, 2009**

MY PRIMARY OBJECTIVE: SELF-SUFFICIENT SURVIVAL

Dr. C. C. Miller *Fifty Years Among The Bees*

G.M. Doolittle *Scientific Queen Rearing and A Year's Work In An Out-Apiary*

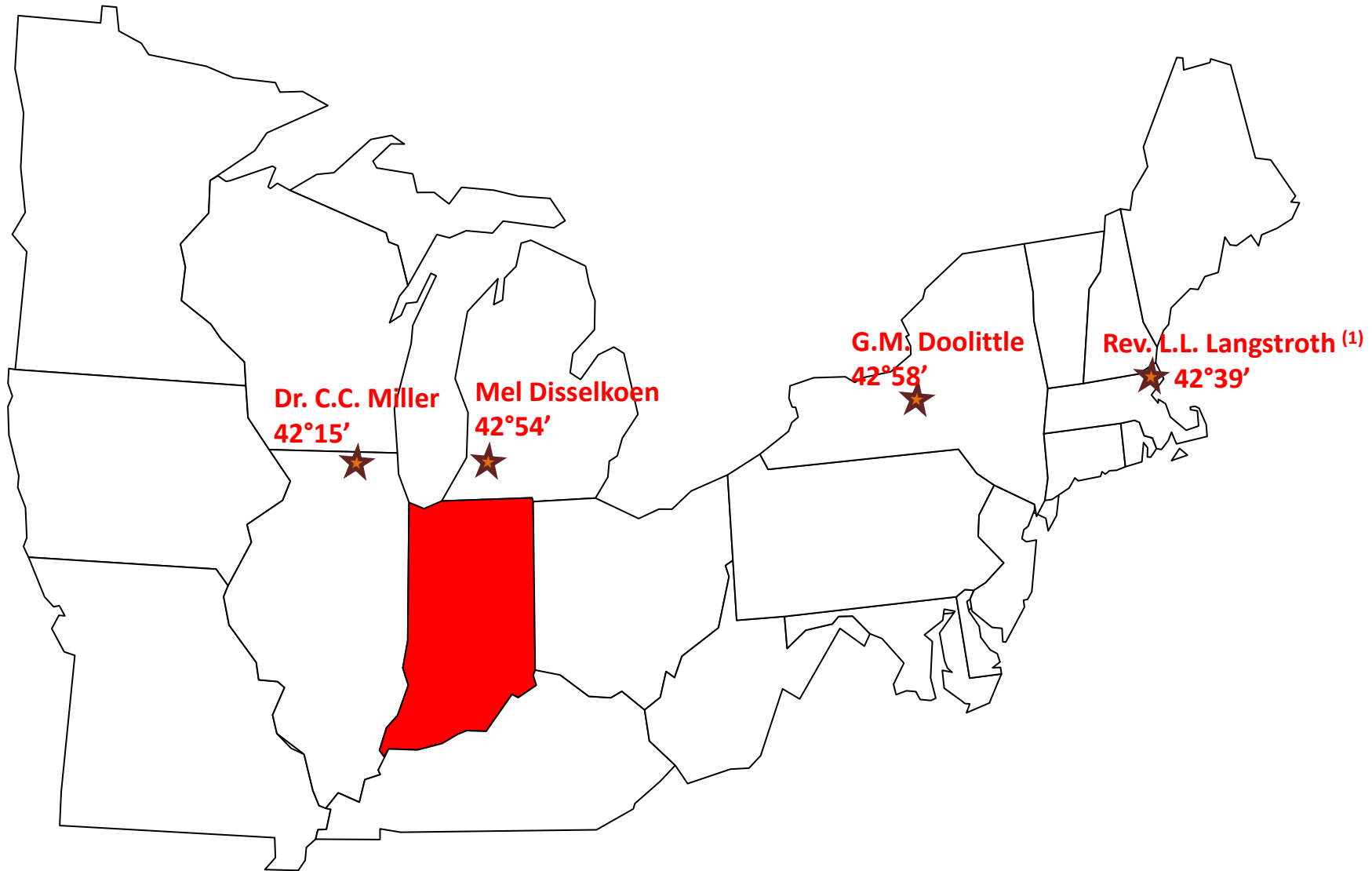
Solid Bottom Boards

Winter Outdoors

No Miticides

My objectives have been met

43rd PARALLEL: WHERE IT ALL STARTED



(1) Rev. L.L. Langstroth began keeping bees in Andover, Massachusetts in 1836 (Source: Eastern Apicultural Society)

LET'S GO BACK: GREAT LAKES AND ONTARIO BEEKEEPERS HAVE IDEAL CLIMATE, LUSH FLORA, AND PROFITABLE MARKETS



Climate favors both May and July Starts

Intense, overlapping honey flows

Climate doesn't favor Africanized bee nor Small Hive Beetle

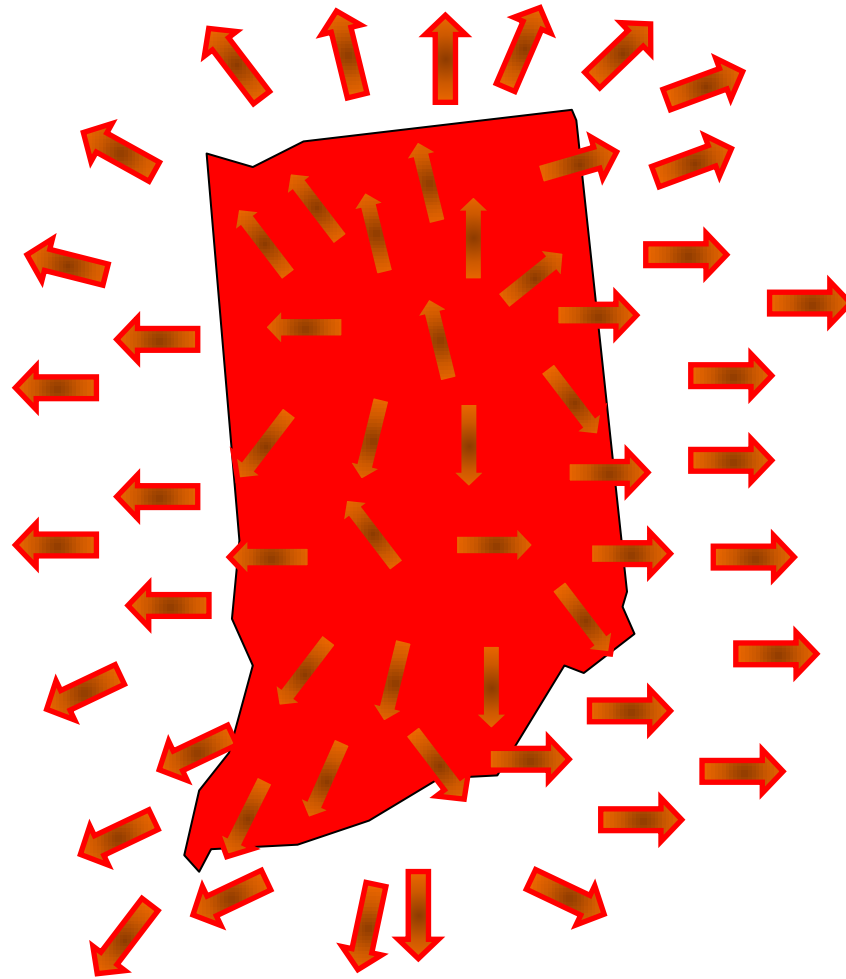
Opportunity for local and distance markets

No need to import

Opportunity to export

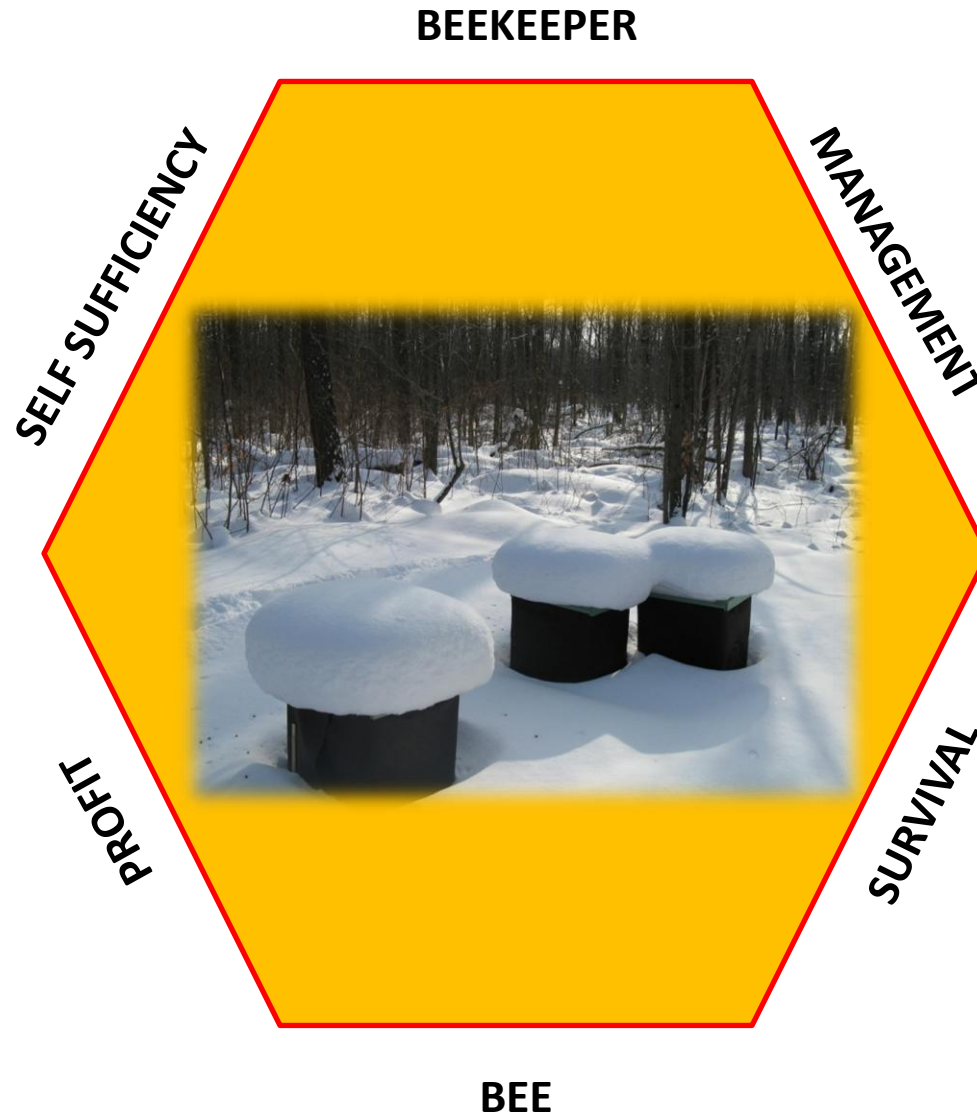
Centralized location

INDIANA: LOCATION-LOCATION-LOCATION
Local and Export Market Potential Is Enormous

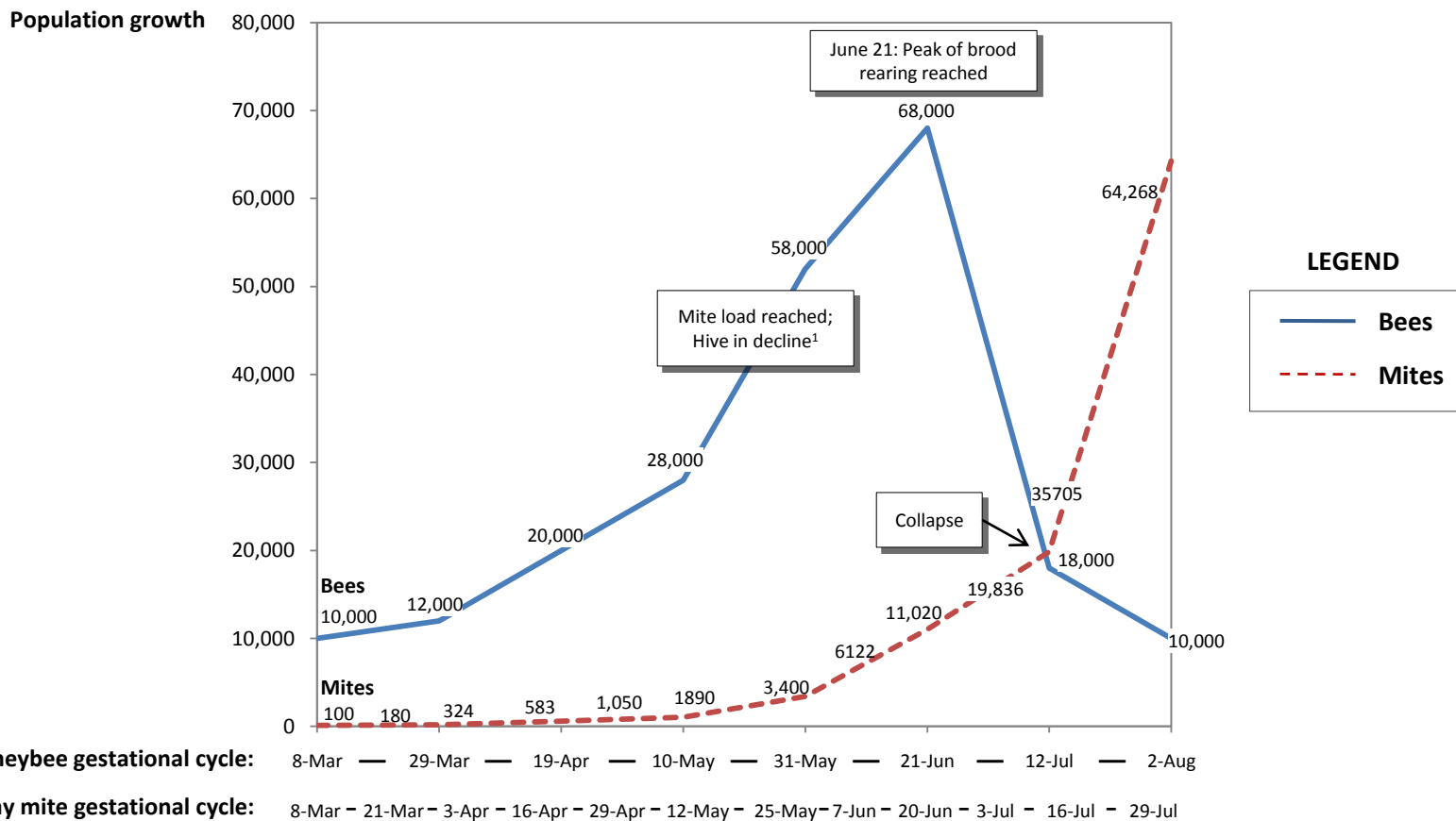


Indiana could supply bees for *any-purpose-any-where-any-time*

HOW TO GET THERE: MAKE A BEE-LINE



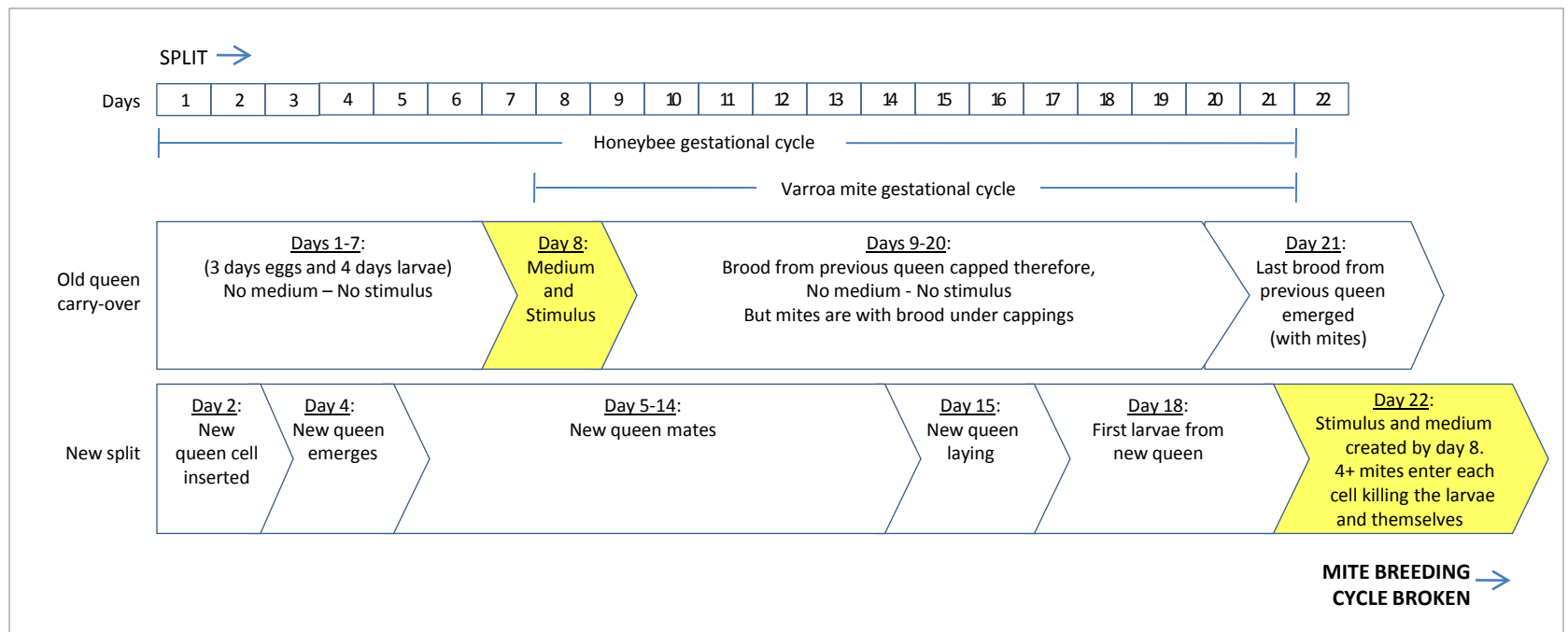
MITE LOAD: HONEYBEE VERSUS MITE REPRODUCTION STARTING WITH 100 MITES AND 10,000 BEES ON MARCH 8 IN THE GRAND RAPIDS, MI AREA (43RD PARALLEL)



¹ The mite load of a honeybee colony in the USA is 3200 mites (*Mites of the Honey Bee*, Dadant & Sons Inc. 2001, page 234)

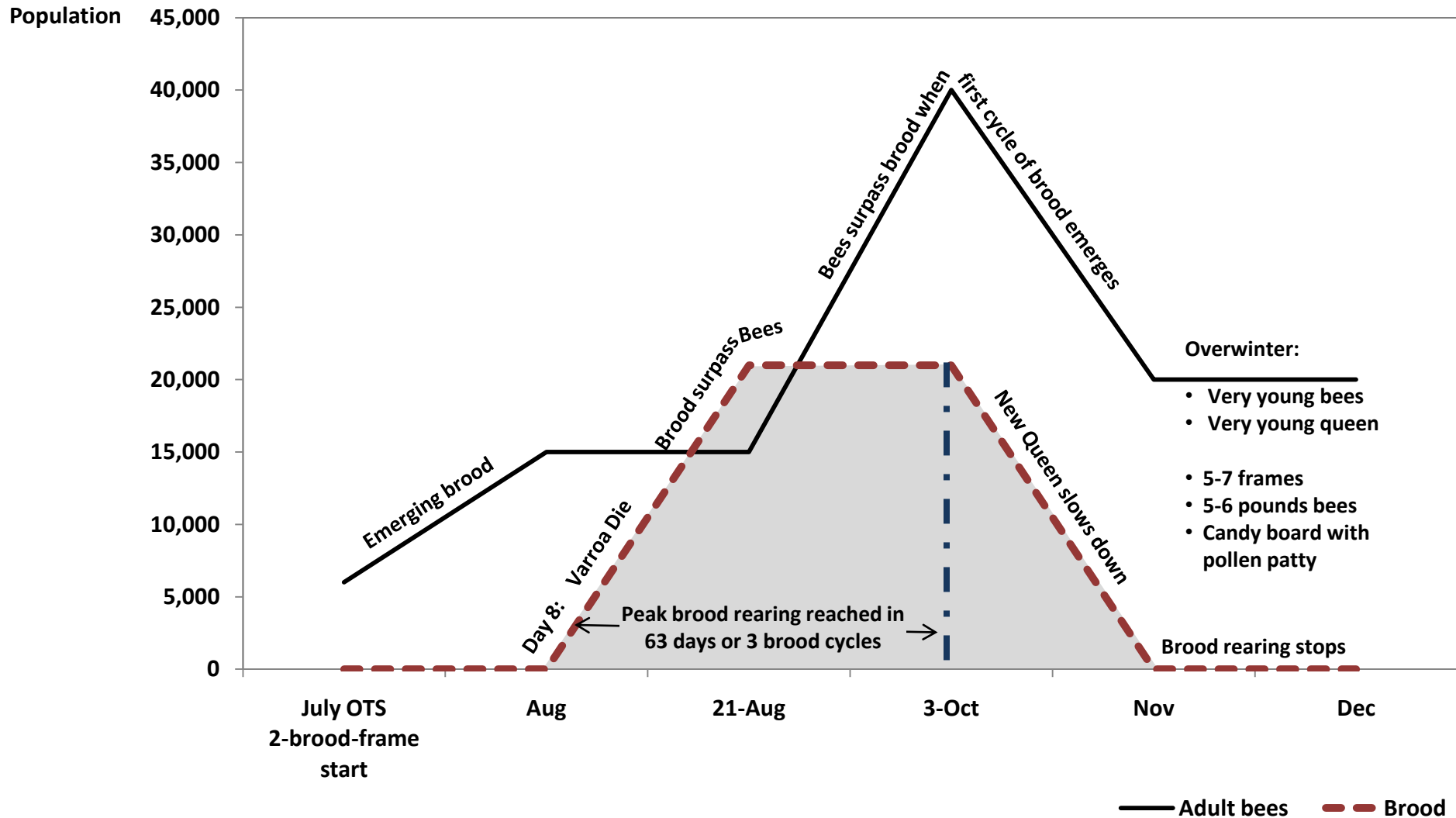
UNLOADING THE MITE: MAKING STARTS BREAKS THE NORMAL BREEDING CYCLE OF THE MITE BY INTERRUPTING BOTH THE MEDIUM AND THE STIMULUS AND THE STIMULUS

A fertile mite must have a *medium* to lay her eggs and a *stimulus* to start reproducing. The medium and stimulus are always on the 5th day of the larvae, day 8, one day before capping the cell



POPULATION DYNAMICS OF A JULY START ARE VERY DIFFERENT THAN A TRADITIONAL HIVE

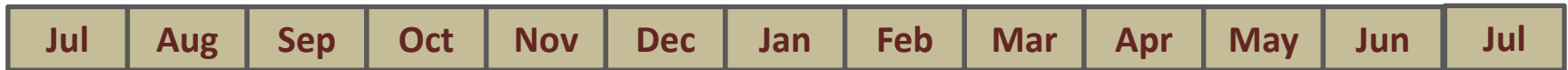
Reaches 63,000 Bees With Queen Laying Minimum Of 1,000 Eggs/Day



COLONY REARING FROM START TO FINISH:

Modern Beekeeping Is Tailored Beekeeping—Your Target Defines Your Approach

Start



- July starts
- Almond starts
- Feed and check mating success
- Install candy boards and wrap
- Transport almond starts
- Harvest May honey starts
- Brood rearing begins slowly
- Almond starts now mature for pollination
- Full-strength hives
- Apple starts
- Blueberry starts