



Nuc Initiatives in Missouri

Presented by
Cathy Misko

President, Midwestern Beekeeper's Association
MBA Nuc Initiative Pilot Program started August 2014
www.midwesternbeekeepers.org

A Smidgen about Me ?

- Physician's Wife
- Mama of 8
- Practice Sustainable Beekeeping 25 years
- Average 20 Colonies
- Midwestern Beekeepers Assn. President









2007 = \$75.00
2015 = \$115.00 - \$140.00



It was time for a **CHANGE!**

- Mo State Beekeeping Conference...Mike Palmer from VT
- Raise your own Nucs and Queens from Swarm Cells
- June and July Provide Increase Drone Populations
- I Primarily Started nucs for Swarm Control
(However I was unsure of local bee temperaments.)

Since 2008 I have had less than a 1%
Winter Loss

- I Use and Raise Local Stock
- I have Eliminated Prophylactic Chemical/Antibiotic Treatments
- Use Screened Bottom Boards
- Test and Treat Heavily with Powdered Sugar
- Practice Drone Removal

Mother and Daughter Queens which Wintered Together



Queen Prices \$20 – \$500 and up!

- Shipping: Stress Kills, Postal Delays
- Accidental Death
- Improperly Mated
- Poor Brood Pattern
- Aggressive Temperament
- ??????
- *Seems* to be an Increase in Spring and Fall Failures

What is a Nuc?

- An Official Nucleus of a Mature Colony.
- A BALANCED Miniature: 10-25 % Population of a Mature 60,000 member Colony.
- Not a Type of Box or Specific Frame Configuration.
- Composed of 2-10 frames in a Small Box or Standard Deep.
- Split = Nuc used for Apiary Increase

Why Make Nucs?

- Propagate Survival, Adaptive, and Hardy Queens/Genetics
- Attempt “Sustainability” of Apiaries
 - *High Winter, Spring, and Summer Losses
 - *Rising Costs of Queens and Bees
 - *Work with the “Power of Nature” known as
REPRODUCTION / SWARMING
 - *Teaching Purposes
 - *As Mating Nucs/Queen Banks
 - *Ample Supply of Proven Queens



Official Inspiration: Michael Palmer 2010 (French Hill Apiaries VT)

- Keep Accurate Records
- Breed from the Best
- Splits are Most Productive after FEEDING
- Avoid Smoking when Making Nucs (runs the nurse bees off brood.)

Basic Nuc Set Up

(Varies According to Season)

5 Frame Nuc (Springtime)

- Honey: Uncapped Honey Toward Inside
- Brood
- Brood
- Part Brood plus Food
- Empty Drawn Comb
- Add Caged Queen or Cell

(Avoid shaking down bees or will increase swarming.)

Basic Beekeeping Management

5 Reasons Why We Loose Bees

1. Disease and Pests
2. Nutrition and Lack of Nutritious Forage
3. Chemicals (F,H,P...suicide!)
4. Lack of Diverse Genetics
5. Beekeeper Error...get educated/connected!



(A bee-haver verses a “Keeper of the Bees”...they need us educated)

January

Mature Colony

Feed if Needed

1. Emergency Feed until Mid Jan. then Light Syrup (1:1 or 1:2)
2. Keep Food in Contact with Cluster
3. Clear Entrance of Dead Bees
4. Assure Ventilation Holes Open

Nuc

Feed if Needed

1. Emergency Feed until Mid Jan. then Light Syrup (1:1 or 1:2)
2. Keep Food in Contact with Cluster
3. Clear Entrance of Dead Bees
4. Assure Ventilation Holes Open

February

Mature Colony

1. Light syrup (1:2 or 1:1)
(1:2 helps dilute honey)
1. Pollen Protein comes in with
Willows, Maples, Elm, Dandelion
2. Snug Honey Stores against
Brood if temps warm enough
3. Keep Food Stores in Contact
with Cluster

Nuc

1. Light syrup (1:2 or 1:1)
(1:2 helps dilute honey)
1. Pollen Protein comes in with
Willows, Maples, Elm, Dandelion
2. Snug Honey Stores against
Brood if temps warm enough
3. Keep Food Stores in Contact
with Cluster

March

Mature Colony

1. Full Inspections-Keep Queens Marked
2. Reverse Boxes Locating Brood in Bottom
3. Honey Stores Next to and Directly Over Brood
4. Cull Empty Old Outside Frames
5. Clean Bottom Board/Remove Mouse Guard
6. Check for Mites
7. Beetle Blasters
8. Feed 1:1 if Necessary

Caution: Do not over feed limiting open cells for egg laying

Nuc

1. Full Inspections-Keep Queens Marked
2. Reverse Boxes Locating Brood in Bottom if 2 Tiered
3. Honey Stores Next to and Directly Over Brood
4. Clean Bottom Board/Remove Mouse Guard
5. Check for Mites
6. Swarm Management-Assure room
7. Beetle Blasters
8. Feed 1:1 if Necessary

Caution: Do not over feed limiting open cells for egg laying

April

Keep alert of congestion if feeding...need open cells for eggs

Mature Colony

1. Feed 1:1 *Early* April if Wax Production Needed
2. Cease Feed –Place Queen Excluder
3. Begin Supering with Drawn Foundation
4. Start Queen Production along with Purple eye Drones
5. Maintain Beetle Blasters
6. Cull Empty Old Outside Frames

Nuclear Explosion

1. Transfer Ready Nucs to Hive Bodies
2. Split to Make Spring Nuc with 2 Frames of Brood (*Mindful of your Queen*)
3. Beetle Blasters in Place
4. Feed 1:1 *Early* April if Wax Production Needed

May

Mature Colony

1. Swarm Management! Produce Queen Cells
2. Keep Congestion down by making more Nucs
(*Do not transfer your queen*)
3. Cull Empty Old Outside Frames
4. Basic Beekeeping Adding New Frames-Easing to the Center Respecting the Brood

Nuc

1. Start Providing Nucs (\$110-\$290)
2. Recycle Brood/Food
 - *Mature but Weak Colonies
 - *Mating Nucs
 - *Splits

June

Mature Colony

1. Dud Colonies
 - *Disease Free
 - *Make 2-5 Nucs
 - * Add Queen Cells
 - * Display Ole Queen in a Bug Collection

Nuc

1. Configure Over Wintering Nucs
 - *Your Queens/Cells
 - *2-3 Frames Brood
(*NO EGGS/Young Larva*)
 - *Frame of Food
 - *Mostly Open Drawn Comb

July

Mature Colony

1. Test Moisture and EXTRACT Honey
2. Return Wet Supers to Refill
3. Return Wet Supers over Inner Cover to Clean and then Store
4. Share Uncapped Honey with Over Wintering Nucs
5. Feed Light Syrup (1:1 or 1:2) if Dearth AND Supers OFF
6. Provide Water
7. Consider Fall Requeening with Proven Queen
8. Powder Sugar Roll Mite Test
9. Treat (PS) if Honey Supers Off and on Screened Bottom Board
10. Beetle Blasters ON

Nuc

1. Establish more over Wintering Nucs
2. Decrease Entrance to Discourage Robbing (All weak Colonies)
3. Small Hive Beetle Traps
4. Feed Light Syrup (1:1 or 1:2)
5. Provide Water
6. Provide Mite Testing
7. Mite Treatment (PS Dusting if Screened Bottom Boards)

August

Mature Colony

1. Remove Excluder and Honey Supers
2. Feed if Dearth 1:2 Light Syrup
3. Winter Bees are in Production
4. Check for Requeening Need
5. Small Hive Beetle Traps
6. Powdered Sugar Dusting if Appropriate
7. Provide Water

Nuc

1. Add 2nd Box for Food Chamber
2. Use Drawn Comb
3. Check Mites
4. Treat for Mites if Appropriate
5. Small Hive Beetle Traps ON
6. Reducer ON
7. Feed 1:2 Light Syrup
8. Provide Water

September

Mature Colony

1. Continue Feeding until 65 Pounds Stored
2. Powder Sugar Dusting if Appropriate
3. Mite Testing
4. Small Hive Beetle Traps On
5. Check for Marked Queen

Nuc

1. Feed until Top Box Full
2. Mite Test
3. Assure Marked Queen
4. Reducer, SHB Trap ON

October (Early)

Mature Colony

1. Feed Heavy Syrup 2:1
2. Brood in Bottom
3. Assure Marked Queen
4. SHB Trap over Brood/Cluster for Winter

Nuc

1. Feed Heavy Syrup 2:1
2. Share Extra Honey from Mature Colonies
3. Align Brood in Center
4. Assure Marked Queen

November

Mature Colony

1. Winter Management
 - *Wind Break
 - *Proper Upper Ventilation
 - *Mouse Guards On
 - *SHB Trap over Cluster
2. Feed Heavy Syrup 2:1
3. Full Winter Stores by

Thanksgiving!

Everyone is thankful!

Nuc

1. Winter Management
 - *Wind Break
 - *Proper Upper Ventilation
 - *Mouse Guards On
 - *SHB Trap over Cluster
2. Feed Heavy Syrup 2:1
3. Full Winter Stores by

Thanksgiving!

Everyone is thankful!

December

Mature Colony

1. Emergency Feed if Needed
(Fondant, Candy, Mush etc.)
1. Keep Food in Contact with
Cluster
2. Clear Entrance of Dead Bees
3. Assure Ventilation Holes Open

Nuc

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Common Mistakes Making a Nuc Fail

“there are lessons in the loosing”

- Queen is Rejected or You Let the Bees Raised Poor Queen
- Split Too Early Before Temps Remained CONSTANTLY Between 50-70 Degrees
- Transferred Too Few Bees to Attend or Keep Brood Warm...”Chilled Brood”
- Nuc Negligence: it Became Over Crowded Allowing the Nuc to SWARM!

Emergency Feed

Candy Board “Tom O’Neill’s Favorite”

(Fills two cookie sheets about a quarter of an inch deep)

5 lbs. white granulated sugar

1 lb. water

¼ teaspoon cream of tartar

Heat the water and mix in the sugar and tartar. Cover and stir regularly. Bring to “Hard Ball” @ 260 degrees. Let it cool down to about 225 then whip in air which will make it turn white. Careful when you whip in the air, the stuff starts to grow. Line two cookie sheets with wax paper and carefully pour mixture. That’s about it. Good luck...Tom

Hint: Candy can be poured into paper plates and stored in baggies ready to invert over the needy clusters.

Sugar Mush

- "Ted Jansen’s Mush." In a gallon zip lock bag, pour in 5# of dry sugar, and 1-1/4 cup of water. Mash it around to mix. Place the closed securely zip lock bag over the top bars. Cut a couple of generous slits on top. Place a shim or shallow super to account for the height of the baggy.

Fondant Candy Recipe #1

Mix: 2 cups water, 5 lbs. cane sugar and 1 tbsp. white vinegar.

Heat to 232F using a candy thermometer.

Cool to 180F-200F and stir briefly until opaque.

Pour into small pie pans or small cereal boxes lined with wax paper.

Let cool before unmolding and store wrapped in wax paper in refrigerator until needed.

Fondant Candy Recipe #2

1. Use 1 part water to 4 parts granulated sugar.
2. Add ¼ tsp. vinegar per pound of sugar.
3. Bring to boil, stirring constantly until boiling commences.
4. Boil without stirring for 3 minutes, covered.
5. Insert thermometer and boil uncovered until 234°F is reached
6. Remove from heat and allow cooling to 200°F.
7. Whip with whisk until whiteness occurs.
8. Pour (QUICKLY!) onto waxed paper which has a towel underneath.
9. Allow to cool undisturbed.
10. Remove waxed paper and store each cake in a plastic bag.

The white cakes can be handled as plates, but are fudgy. The waxed paper is readily removed

before storage. If the towel is fluffy the wax paper depresses limiting the width of the cake.

Mountain Camp Feeding

The most basic and a way of hardship is to provide raw sugar, the finer the better. Some will spray mist water over it causing the sugar to crust so to prevent the bees from carrying it out as a foreign substance. It can be poured in division board feeders, on top inner covers, or directly on newspaper lined directly over frames. Space (shim) needs to be added to allow bees' access.

Ideally bees should have enough stores before Thanksgiving but if an emergency occurs that they need food or they will starve, then the beekeeper have some options. It is true that bees can be fed too much, crowding space needed for clustering and crowding their gut. As they fill up and can not take cleansing flights due to the weather, their GI tract distends with fecal material contributing to death.

For colonies needing fed remember:

1 gallon of syrup = 7 pounds stored reserve

DEVELOPING A LOCAL STRATEGY FOR NUCS & QUEENS ... a Three Rivers Beekeepers Initiative

By JOHN TIMMONS

Three Rivers Beekeepers (2011)

Midwestern Beekeepers

Nuc & Queen Initiative Pilot Program

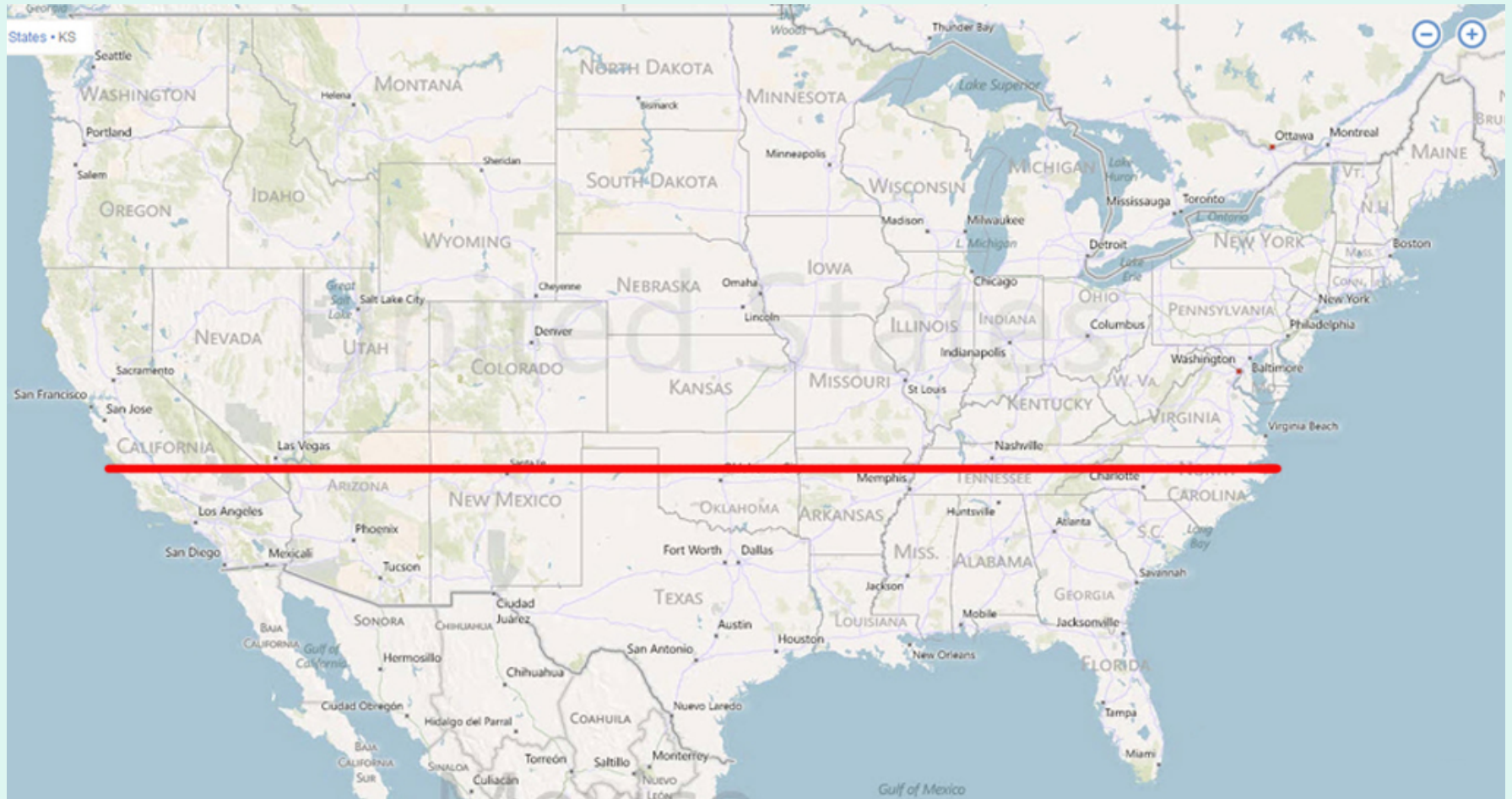
- Our History
- The Old Way of Doing Things ...
- Sustainable vs. Non-Sustainable Beekeeping

Midwestern Beekeepers

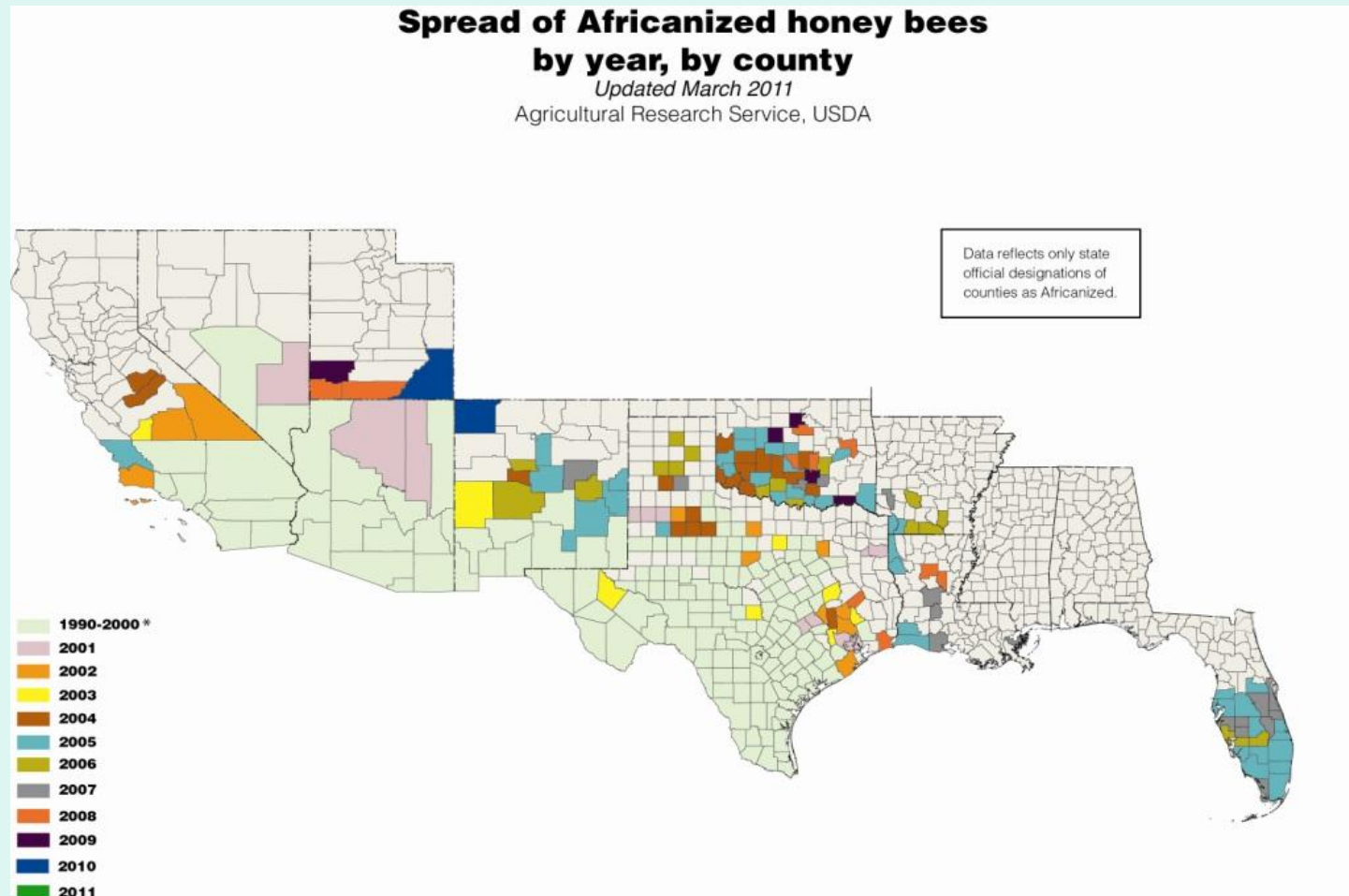
Nuc & Queen Initiative Pilot Program

- Eliminate Dependency on Importation of Southern Nucs & Queens
- Provide Instruction in “Sustainable” Techniques ...
 - Summer Nuc Production
 - Techniques for Over-Wintering Nucs
 - Small-Scale Queen Rearing Techniques
- Facilitate Sales & Distribution of Initiative Nucs & Queens (Pool)
- “Rule of 36”
- Requires Commitment from Initiative Participants for Nucs
- TRB 1st Year GOAL ...100 Nucs however 200 were sold!

“Rule of 36”



AHB in FL, LA, AR, OK, TX, NM, AZ, UT, NV, CA



Midwestern Beekeepers

Nuc & Queen Initiative Guidelines

- Local Stock per “Rule of 36” (exceptions for 2015 – 16 Season)
- 4-frame or 5-frame ... Mediums or Deeps
- Pricing at Discretion of Supplier
- All Sales Revenues Go to Provider
- Sold by Priority
 - MBA Members
 - Open Availability
- New or Like-new Frames
- 2 Frames of Brood Covered w/ Bees (esp. in 4-frame nuc)
- A Frame of Brood will be a Minimum of 75% FULL of Brood on each Side of the Frame.
- Healthy Laying Queen (Origin and/or age noted)
- Nuc Transfer Arranged Between Buyer & Seller



©Diana White

Midwestern Beekeepers

Nuc & Queen Pool

- For SUPPLIERS ... Provides a Central Location Where MBA Member-Suppliers Can Post the Availability of Local Nucs and Queens
- For BUYERS ... Provides Stock Availability & Contact Information of Local Nuc & Queen Suppliers
- Requires Registration (Password Required)
- All Posted Stock Must Conform to the MBA Nuc & Queen Initiative Guidelines
- Registration, Submission & Browsing Pages
- More Information Available on MBA Website

[Home](#)[About TRB](#)[Our Next Meeting](#)[Swarms](#)[FAQ](#)[The BeeHive Forum](#)[Become a TRB Member](#)[Contact Us](#)

Order Name Badge!

[Order Membership Name Badge](#)

Resources ...

[Links & Resources](#)[News & Noteworthy](#)[Meeting Materials](#)[Mentor Contacts](#)[Club Extraction Equipment](#)[Beginner's Reading List](#)[Beekeeping Suppliers](#)[2011 North American Beekeeping
Conference Lectures](#)[TRB Nuc & Queen Initiative](#)[TRB Nuc & Queen Pool](#)

Nuc & Queen Pool Registration Form

Membership registration with Three Rivers Beekeepers is required. If you are not a member of TRB, please exit and register first!

Name

First

Last

Phone

Email

Submit

[Edit this form](#)

Welcome ...

Three Rivers Beekeepers is proud to sponsor this web site for the benefit of all Missouri and Illinois beekeepers.

Three Rivers Beekeepers serves beekeepers from the eastern Missouri counties of St. Charles, St. Louis, Jefferson, Lincoln, Franklin, Warren, Montgomery and Pike along with many western Illinois counties bordering Missouri, in and around the St. Louis region.

Coming Events ...

Three Rivers Beekeepers general membership meeting, Monday, August 15th, 7p, University of Missouri Extension Center, St. Peters, MO. The general membership meeting is preceded at 6p by an open round-table Q&A session. Come with your questions!

Missouri State Fair, August 11 - 21, Sedalia, Missouri. Be certain to visit the Missouri State

Order Name Badge!



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Support MSBA!



SUPPORT YOUR STATE ORGANIZATION!
 Get information on becoming a member of the Missouri State Beekeepers Association by [clicking here](#).

Coming Soon ...



TRB Nuc & Queen Pool Submission

Name of Supplier *

Select your name from below ...

You must select your name from this drop down list. If your name does not appear, either you have not registered as a supplier, or your registration has not yet been processed.

Select to delete this post ...

☐ Delete

If you have no further inventory and want this post deleted, select "Delete" here. You need not complete any further sections of this form. Your post will be totally deleted from the Pool.

Mated/Laying Queens:


Mated Queens Available

Select Number Below ...

Type of Mated Queens Available

Select Queen Type Below ...

Availability Date



Indicate the date these queens will be available.

Virgin Queens:


Virgin Queens Available

Select Number Below ...

Type of Virgin Queens Available ...

Select Queen Type Below ...

Availability Date



Indicate the date these virgin queens will be available.

Queen Cells:


Queen Cells Available

Select Number Below ...

Type of Queen Cells Available

Select Queen Type Below ...

Availability Date



Indicate the date these queen cells will be available.

[Edit this form](#)

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Missouri State Fair, August 11 - 21, Sedalia, Missouri. Be certain to visit the Missouri State Beekeepers Association booth located in the air-conditioned Agriculture Building. You'll find displays of competition hive products (honey, wax, etc.), as well as lots of honey products for sale, including honey flavored ice cream!

OUR AUGUST MEETING ... Grant Gillard, President of the Missouri State Beekeepers Association will discuss honey bee treatments, as well as a variety of other interesting subjects.

OUR SEPTEMBER MEETING ... David Burns from Long Lane Honey Bee Farms in Danville, Illinois will speak on "Sustainable & Natural Beekeeping".

OUR OCTOBER MEETING ... Stu Jacobson of the Illinois Queen Initiative will speak on "Backyard Minimalist Queen Rearing".

John Timmons

From: jit50@charter.net
Sent: Monday, August 15, 2011 1:19 PM
To: jit50@charter.net
Subject: New submission from Nuc & Queen Initiative Registration/Nuc Submission

Name

Tim Hyde

Email

tim.hyde@yahoo.com

Phone

(636)226-6474

Number of Nucs

4

Nuc Type

- Conventional (Langstroth)

Nuc Sizes Available

Five Frame

Frame Size

Deep

Availability Date

05/19/2012

Queen Type

Italian

Order Your Name Badge!



[Order Membership Name Badge](#)

The Great MO "Buzz Off"

"Great Missouri Buzz Off" ... a statewide initiative to raise the awareness of bees and promote beekeeping.



[Click image to learn more ...](#)

Resources ...

[Links & Resources](#)

[News & Noteworthy](#)

[Meeting Materials](#)

["Bee Buddy" Contacts](#)

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[Beginner's Reading List](#)

[Beekeeping Suppliers](#)

[TRB Nuc & Queen Initiative](#)

[TRB Nuc & Queen Pool](#)

[Honey for Sale](#)

[Equipment for Sale](#)

The following suppliers have nucs and/or queens available for purchase. Please contact the supplier directly to make arrangements for purchase and delivery/pickup.

Each posting will remain for 30 days. If a request to renew the posting is not made to webmaster@threeriversbeekeepers.com prior to the 30 day expiration, the posting will be removed.

Supplier Name: John Timmons
 Telephone: 636-940-8202 Email: jit50@charter.net
 Nucs Available: 1 Nuc Type: 5-frame
 Bee Type: Local Survivor Stock
 Date Nucs Available: 6-11-12

Posting Date: 6-5-12

Supplier Name: Bob Fincke
 Telephone: 636-305-8818 Email: bfinck@aol.com
 Mated Queens Available: 6 Queen Type: Italian Hygienic
 Date Mated Queens Available: 4-28-12

Posting Date: 5-31-12

Supplier Name: Larry Hensley
 Telephone: (314) 355-6935 Email: larrythebeeguy@charter.net
 Nucs Available: More than 10 Nuc Type: 4-frame
 Bee Type: Minnesota Hygienic
 Date Nucs Available: 5-7-12
 Mated Queens Available: More than 10 Queen Type: Italian
 Date Mated Queens Available: 5-28-12

Posting Date: 5-31-12

Coming Events ...

OUR JUNE MEETING ...
 Monday, June 18th, 2012, 7:00 pm.
Jerry Hayes will speak on his work, his goals at Monsanto and beekeeping in general. As always, the main meeting will be preceded by the 6:00 pm Q&A session with **Ted Jansen**. [Click here](#) for details and a map.

Heartland Apiculture Society,
 11th Annual Conference, St. Louis, MO, July 12th - 14th, 2012.
 University of Missouri at St. Louis.
 For more information and to register, go to www.heartlandbees.com.

Missouri State Fair, August 9th-19th, Sedalia, MO. Beekeeping product judging contests, demonstrations. TRB will sponsor "TRB Day-at-the-Fair" on August, 17th. [Click here](#) for details.

TRB 2nd Annual Club Picnic, October 14th, 2012, Kiandike Park. [Click here](#) for details.

Missouri State Beekeepers Association, Fall Meeting, October 26th & 27th, 2012, Kansas City, Missouri. [Click here](#) for details, agenda and registration information.

Support MSBA!



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Nuc & Queen Initiative

Keys to Success

- *Dedication to Education
- *Summer Nuc Production
- *Success in Over-Wintering Nucs
- *Queen Rearing Instruction
- *May- Great Start for Beginners

QUEEN'S Foundation RULES

- Attend a Queen Rearing Class
- Midwestern 1st May 2, 2015 presented by Cory Stevens
- Research and Reserve your spot: Classes are usually limited to facilitate greater learning
- Grafting Methods vs. Non-Grafting

Cory Stevens: Master Beekeeper Bloomfield MO



Various Means to Raise Queens...Michael Bush

- [The Doolittle Method 1846](#)
- [The Jenter Method \(Apimondia's top award in 1986\)](#)
- [The Hopkins Method 1911](#)

- [Isaac Hopkins on Queen Rearing 1886](#)
- [Alley Method of Queen Rearing 1883](#)
- [Miller Method of Queen Rearing 1885](#)
- [Smith's Better Queens Method 1949](#)
- [Smith Method of Queen Rearing 1923](#)
- [A simple way to raise a few good queens](#)



Utilization



IN TRAINING TO RIDE
DIABETES OMIGINE









EZ Nuc Orders \$9 each

Pick up March

- The Ez Nuc www.jesterbee.com can be stored flat when not in use and it also makes a great bait hive and swarm box to keep in your car ready for you to be someone's hero during swarm season! Be prepared to examine box and place your orders . You may make checks out to Midwestern Beekeepers Assn. When not in use these boxes can be miraculously stored "flat" saving much needed space!!!!
- (Est. delivery at Bass Pro "Special Gathering-Nucs" March 2nd)
- Stuart (795) 969-6110
stuartadietz@netscape.net



Beekeeping Calendars \$15



June 2015

Catch a star: Also known as Starflower, Borago is native to the Mediterranean, but has gained popularity in gardens in Europe and America. Besides being a beautiful addition to your annual landscape, Borago officinalis bears with honey-sweet for several weeks in midsummer. Though I have not seen any sign of pollen-gathering, the attractive annual undoubtedly provides a sufficient nectar to keep them coming back for more. Russians have also found numerous uses for borage. Its leaves are used in salads, its flowers as garnish or sugar-coated candy, and its oil is health food supplement as a source of gamma-linolenic acid, but mostly it's a treat for the bees!

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	June 1st Bumblebee 1:27	1 Full Strawberry Moon	2	3	4	5
			Ice Tea Day			6
7	8	9 Third Quarter	10	11	12	13
Flag Day						
14	15	16 New Moon	17	18	19	20
Father's Day 1st Day of Summer						
21	22	23 First Quarter	24	25	26	27
28	29	30	1	2	3	4

Sweet bee?
Tag some honey instead of sugar - it's healthier, and it tastes better too!



20th Annual Beginning Beekeeping Workshop **March 7, 2015**

Midwestern Beekeeper's Association

Saturday, March 7, 2015 (8:00-5:00)

Part 2 Sunday, March 15 (2:30-4:45)

The 20th Annual Beginning Beekeeping Workshop is an all day event at
The Point @ Graceway

5600 Blue Ridge Cutoff Raytown, MO 64133

The intensive class agenda includes: Bee Biology; Equipment; Acquiring bees; Spring, Fall, and Winter Management; Bee Diseases and Pest Management; Educational Opportunities; Extracting Honey; Hive location; Honey Plants; Beekeeping Etiquette; Questions and Answers; Door Prizes; and a chance to win a **complete colony of honey bees**. Registration Fee includes a Beekeeping Handbook, membership in both the Midwestern and Missouri State Assns., a monthly newsletter, refreshments, and lunch will be provided. Beekeeping Supply Vendors will be on site.

Pre-registration Required due to limited space. Visit: www.midwesternbeekeepers.org
Cathy Misko (660) **656-3485** or Cheryl **(816) 509-5883**

Questions???

Bee on Snow-on-the-Mountain (*Euphorbia marginata*)

