Your Bees Are About To Arrive – Are You Ready?
(And, For Those Existing Hives, Are You Ready For Spring?)
– February 2017 –

Micky Cross
Co-First Vice President
OVERVIEW

• Hive Location
• Hive Set Up
• Receiving Bees
  • Via Nucleus ("Nuc")
  • Via Package
• Feeding
• Goal of First Inspection
  • New Hive
  • First Spring Inspection For Existing Hives
• Be Ready For Swarm Season
Hive Location

- Inconspicuous
  - Neighbors May Have Fear of Stinging Insects
    - Home Owner’s Association Concerns
    - Be A Good Neighbor
      - Let Them Know
      - Give Them Honey
  - Visibility (Fencing, Hedges)
  - Paint Color
- Water Source
- Initial Foraging Flight Path
- Accessibility
  - Vehicle Access
  - Carrying Honey Supers
- Livestock
- Sun Exposure

Credit: Illustration courtesy of Howland Blackiston
The perfect suburban setting for your hives has easy access, good drainage, a nearby water source, dappled sunlight, and minimal wind.
Hive Set-Up

• Hive Stand
  - Off The Ground
  - Easy On Your Back

• Spacing/Arrangement
  - Room To Work
  - Separation Distance
  - Drifting

• Level
  - Level Right-to-Left
  - Slight Incline to the Front

• Facing
  - Not As Critical As Sometimes Asserted
  - Opening Not Facing Prevailing Winds
  - East to South-East All Else Being Equal
Installing A Nucleus (Nuc)

- **Full, Functioning Hive**
  - Can Stay in Nuc Box For A While if Needed (Open the entrance)
  - Best to Install Right Away When Possible
  - Have Native Food Stores, So Can Use Smoke

- **Move The Frames From the Nuc To The Hive Brood Box**
  - Start With Outside Frame
  - Keep In Same Order and Orientation
  - Place In The Middle of the Deep
  - Fill In the Outside Slots With Empty Frames

- **Mind the Queen**
  - Check Each Frame and Handle Them As If The Queen Is There
  - If Not Seen, Assume The Queen Is Still In The Box

**Damaging The Queen Is The Only “Critical” Mistake You Can Make**
Installing A Nucleus (Nuc)
Installing a Package & Queen

• Not A Full, Functioning Hive
  - Need To Install As Soon As Possible
    – If Have To Wait, Store in Dark, Cool, Dry Area – Keep Them Fed
  - No Native Food Stores, Just the Feeding Cup – Don’t Use Smoke
  - Sugar Syrup Sprayer (1 to 1)

• Three Primary Ways
• Basics The Same For All
  - Remove The Feeding Can From The Package
  - Remove The Queen Cage From The Package
  - Remove The Cork From The Candy End of The Queen Box
  - Punch Hole In Candy
  - Hang Queen Between Frames

• Difference Is In How To Put The Bees Into The Brood Box
Installing a Package & Queen

- Putting The Bees Into The Brood Box -

• “Box-in-Box” Method
  - Remove Half The Frames From One Side of The Box
  - Install Queen Cage
  - Place the Package Box Into The Brood Box & Remove Cover
  - Return In a Few Days To Remove Package Box and Add Frames

• “Pour/Shake” Method -- Two Variations
  - One (All Frames Left In)
    – Install Queen Cage
    – “Bump” The Bees To The Bottom of The Package
    – Pour Them Onto The Top of The Frames (Over the Queen)
  - Two (Remove Half the Frames From the Center)
    – “Bump” The Bees To The Bottom of The Package
    – Pour Them into the Bottom of The Box
    – Replace the Center Frames and Install Queen Cage
    – Replace Frames

Improperly Placing The Queen Is The Only “Critical” Mistake You Can Make
Installing a Package & Queen
Feed Your New Hive
- Assuming Bare Frames With No Drawn Comb -

• The First Thing The Bees Have To Do Is Build Comb.
  - Place to Live, Place For Food, Place For Eggs & Brood
  - Without Comb The Colony Cannot Survive
  - Without Enough Food To Build Comb, Colony Build-up Will Be Slow.

• Steady Supply Of Sugar Syrup Makes The Process Quicker & Easier.

• How Long?
  - Most Beekeepers Draw The Line At Some Point & Stop Feeding
  - Unfortunately, Every Beekeeper Will Give You A Different Answer
    – Some Feed Syrup Until There Are Five Or Six Fully-drawn Frames
    – Some Feed Until They Have Two Brood Boxes Full Of Drawn Comb
    – Some Feed The Entire First Season (Not Harvesting Honey)
  - Err On Side Of Feeding — New Colonies Need All The Help They Can Get

Essentially, No Amount Of Sugar Syrup Is Too Much The First Year
Making Sugar Syrup

• Use White, Granulated Sugar
  - Cane Sugar Most Often Recommended
  - Beet Sugar Essentially The Same, But May Be From Genetically Modified Organism (GMO) Sugar Beets
  - Cheapest Cane Sugar Should Be Fine

• Generally Hot Tap Water Is Sufficient To Put Sugar In Solution
  - May Have To Heat Water On Stove For High Sugar Concentrations
  - Do Not Put Sugar Into Boiling Water or Boil Water After Sugar Added
  - “Burned” or Caramelized Sugar Can Cause The Formation of HMF (Hydroxymethylfurfural) Which Is Toxic To Bees

It Is ALWAYS OK To Feed Your Bees As Long As You Don’t Have Any Honey Supers You Intend to Harvest On The Hive
## Making Sugar Syrup

- Recipes -

One Cup Nearly Boiling Water Weighs ~ 8 ounces (1/2 a pound)

<table>
<thead>
<tr>
<th>Amount of Sugar</th>
<th>Two Parts Sugar To One Part Water (2:1)</th>
<th>One Part Sugar To One Part Water (1:1)</th>
<th>One Part Sugar To Two Parts Water (1:2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Pound</td>
<td>1 Cup</td>
<td>2 Cups</td>
<td>4 Cups (1 Quart)</td>
</tr>
<tr>
<td>4 Pounds</td>
<td>4 Cups (1 Quart)</td>
<td>8 Cups (2 Quarts)</td>
<td>16 Cups (1 Gallon)</td>
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<tr>
<td>5 Pounds</td>
<td>5 Cups</td>
<td>10 Cups</td>
<td>20 Cups</td>
</tr>
<tr>
<td>8 Pounds</td>
<td>8 Cups (2 Quarts)</td>
<td>16 Cups (1 Gallon)</td>
<td>32 Cups (2 Gallons)</td>
</tr>
<tr>
<td>10 Pounds</td>
<td>10 Cups</td>
<td>20 Cups</td>
<td>40 Cups</td>
</tr>
</tbody>
</table>

2:1 – Used in the fall to increase food stores in preparation for winter.

1:1 – Used in the spring & summer to encourage comb building. Used for new hives and splits. Sprayer

1:2 – Used in early spring to stimulate egg laying (when honey is available for the brood)

**Note: One Cup of Sugar Weighs ~ 7 Ounces – So Equal Containers Make ~ 1:1**
Hive Inspections

- Always Have A Plan – Write it Down
- Inspect From The Outside
  - Bee Flight, Pollen Coming In, Signs of Pests, Sounds, Odd Smells, Dead Bees
- Open The Hive
  - Sunny Day When Foragers Are Outside the Hive
  - Accomplish The Plan And Get Out
  - Details Beyond Scope For Today
    - Lot’s of Good Info On-Line and In Books
- Record What You Did / Saw
  - Journal, On The Hive, Spreadsheet
  - Commercial Software
    - (HiveTracks, Beetight, BeeRm, BeeCloud, etc.)
Hive Inspections
- Goal For First Inspection -

• New Hive From “Nuc”
  - When: After 5 to 7 Days
  - Confirm Evidence of Queen
  - Confirm New Comb
  - Confirm Space is Available
  - Inspect Again Every Two Weeks

• New Hive From Package
  - When: After 4 to 5 Days
  - Confirm Queen Is Out of Cage (Set Her Free if Not)
  - May Have Some Evidence of Queen Activity
  - Confirm New Comb
  - Inspect Again In A Week To Confirm Queen Activity Then Every Two Weeks

• Existing Hive
  - Early Spring (Over 50 F)
  - Confirm Queen Activity
  - Mange Space
    – Add Brood Box
    – Reverse Brood Boxes
    – Move Empty Frames
  - Help Weak Hives
    – Combine
    – Add Brood
Get Ready For Swarm Season

• Spare Wooden Ware!

• Each Hive May Need:
  - Additional Brood Boxes
  - Additional Hive To House A Split
  - New Frames
  - One Or More Honey Supers

• Could You Hive a Swarm Capture If The Opportunity Arose?

• It’s Generally Cheaper and Certainly Less Stressful To Have Extra Wooden Ware On Hand Versus Scrambling At The Last Minute When Action Is Needed
SUMMARY

• Pick and Prepare Your Hive Locations

• Set Up Your Stands

• Make Time In Your Schedule For New Bees Installations

• Be Ready To Feed

• Know The Goal of Your First Inspection And Stick To It

• Acquire/Prepare Wooden Ware You’ll Need For Swarm Season
Acknowledgments

- You Tube – Brushy Mountain Bee Farm (http://www.brushymountainbeefarm.com)

- You Tube – Beaman’s Fork (http://beamansfork.com)

- You Tube – Draper’s Super Bee Apiaries, Inc. (http://www.draperbee.com)

- You Tube – Uploaded by Beefitter
QUESTIONS?