Beekeeping in Kenya

Myths, Realities, & Lessons Learned
Tonight, we’ll cover:

• Context: The KiReeco/LCBA project
• Living conditions in rural Kisii
• African bees – the hype v. the reality
• Teaching beekeeping in Kisii
• Setting up the wood shop & training workers
• Kireeco/LCBA Memorandum of Understanding
Kisii Rural Education & Empowerment Coalition (KiReeco)

Above, KiReeco Director Wilma Sofranko at LCBA’s February 2014 Meeting; right, first 4 recipients of KiReeco hive microfinancing
Kisii “Shambas” ~ Small Farms
Honey (Kenya One Village One Product Program). One kilogram (2 pints) of honey sells for approx $6 to 9 in Kenya – for about $16 here.
LCBA’s Volunteers:
Vice President Dave Gaston

Above, Dave demonstrates how a Langstroth hive box works
Thad Stelzner
CC Welding Grad
Weight Allowance:
Two 50 lb. bags to check; 27 lbs. carry-on
From Nairobi to Kisii

Crossing the Great Rift Valley
“Salvador Dali Coffee”
(FunnyPictures.picphoto.net)
Transportation in Kenya...

But paved roads are not the norm...
Above, driving cattle along a muddy road; right, a “piki piki” station
Our Home Base: St. Theresa’s Secondary School; below, founder Theresa Orina

A private, Catholic high school for teens who have lost one or both parents
St. Theresa’s School

Traditional Kisii Song & Dance
Theresa’s “Busy Bees” at KiReeco Organic Farming Expo
Where We Lived
Our Rooms
After the “Short Rains”
Drinking Water & Laundry
Paradoxes of Technology
KiReeco’s Gardens: Seed Banks & Crops to Support St. Theresa’s School
African Honey Bees: The Hype

The terror has come to the desert of southern Arizona, along with a few pockets of the Texas borderlands.

By Gregory McNamee
Overcoming Attitudes About Bees & Beekeeping

Below, a county agriculture official at KiReeco’s Organic Farming Exposition tells visitors how easy it is to harvest honey.

Above, middle, “Mama Honey” is skeptical of the entire concept of managing bees.
Misinformation from Kenya’s Agricultural Ministry . . .

Secondary Agriculture textbook:

• “When a new queen is prepared, a cluster of bees take the queen and drone for their nuptial flight”
• Only 5 to 7 drones mate the queen
• Drones are killed by workers after mating queen
• Queens cannot sting
• Bees are “vicious if handled”
Text makes no mention of:

- Bee space
- Why inspect hives . . .

What to look for

How to inspect

Bees at hive entrance
Photo by Dave Gaston
Kenyan Folklore re: bees

• Harvesting honey is hard b/c bees are “drunk with honey”

• Bees forage in urinals

• Bees are vicious

• You can only open hives at dusk
Vandalized Kenya Top Bar Hives at Asumbi Teachers’ College
African Honey Bees: The Reality

Hives at St. Theresa’s Gardens
Dave’s Video

https://www.youtube.com/watch?v=A7TemdFQOU4
Our First Kisii Hive Inspection
Propolis – African Bees Love It
Working the Bees with smoke, sugar water ~ & gentleness
Were these actually *Apis mellifera monticola*, the East African mountain bee – or hybridized bees?

*Above, A.m. monticola – photo by Imkerei Schwarz; right, photo by Przemysław Gierchatowski*
Children at St. Theresa’s picking greens in front of bee hive
African Bees Need A Better Publicist

Left, *Apis mellifera scutellata*

Right: this is actually a wasp . . .
Left, Beekeeper Edward Ochoro in his apiary

Right, Edward & I preparing for Bee Class at Borabu
Edward’s Observation Hive . . .

. . . Above His Bed
Advantages of Kenyan Bees

- Varroa: resistant
- Nosema: resistant
- Viruses - ?
- Foulbrood: nonexistent
- Forage – year round
- Relatively little pesticide use

A.m. scutellata & a.m. ligustica
Photo, Scott Bauer, USDA
Challenges for Kenyan Bees

- Safari Ants
- Small Hive Beetles
- Wax Moths
- Badly made hives - moisture leaks in
- Honey Badgers

Left, honey badger (todayifoundout.com); above, safari ant (dudu’s diaries.com)
Equipment Fails.....
More Challenges: What Kenyan Beekeepers Complain About

- Difficult to attract bees to hive boxes
- Bees tend to swarm...a lot
- Take too long to produce honey

Photo, Dave Gaston
Teaching Beekeeping Classes:
5 weeks
8 short courses;
363 students

No Smart Classrooms...
Teaching in the Season of the “Short Rains” . . . in Buildings with Tin Roofs
Making Curricular Decisions When Class Time Shrinks From 16 Hours . . . . . . To 8 Hours
Ekegusi Words for All Things Bee...
That is, all things **Enchoke**!

- The Hive: *Omotana*
- Honey: *Oeoke*
- Wax: *Obonchoa*
- Swarm: *Risungi*

(Kenya Top Bar Hive: Biovision.net)
More Vocabulary

- Queen: Emena
- Worker: Fundi
- Drone: [no word in Ekegusi]:

Apis mellifera scutellata, Queen Photo by Scott Bauer, USDA
Bee Concepts for which Ekegusi has no words – at least, none that anyone knew

- Propolis
- Extractor
- Brood
- Varroa Mites

Edward Ochoro’s apiary: photo by Dave Gaston
Instituting a Mentor Program
Hive Inspection Demonstration at the Mentor Training
Incorporating Active Learning... Into a Bee-less Beekeeping Lesson
Asumbi College Bee Class
Borabu Bee Class
The Hive Building Project
Moving Toward Viable Bee Boxes & Stands
Irregular Frames & Boxes: Ants & Moisture Can Infiltrate the Hive, Causing Swarms
Langstroth Hive Boxes Require Precise Measurements
Training Wood & Metal Workers
KiReeco’s original shop
Building Hive Boxes
How things stood when we left...

- 363 beekeeping students trained
- Shop built
- Workers trained
- However, LCBA chose not to renew the MOU with Kireeco because of fundamental disagreements about planning & future steps.

*Bee in Kireeco Herb Garden – Photo, Dave Gaston*