



A Brief History of Beekeeping

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Hillside Honey

Easton, Kansas

“Life is Sweet in Kansas!”

Agenda

- **Beekeeping Overview**
- **The Three General Historical Stages of Beekeeping**
 - **BeeHunter/Gatherers**
 - **BeeDomesticators**
 - **Beekeepers**
- **American Beekeeping**



*** *[Presentations @ www.NEKBA.org](http://www.NEKBA.org)***

References

- **The World History of Beekeeping and Honey Hunting, Eva Crane**
- **The ABC and XYZ of Bee Culture, A.I. Root**
- **National Honey Board**
- **Numerous Internet Resources**
- **Boogerhill Bee Company Beekeeping Class**
- **Bee Culture Magazine**

Why Beekeeping?

Honey – Beeswax - Propolis

- **Food! Sweetener! Mead!**
- **Status Symbol**
- **Bartering/Legal Tender**
- **Religious and Ceremonial**
- **Medicinal**
- **Science**
- **Pollination**



Historical Timeline

- **For 150 – 100 Million Years**
 - Flowering plants have existed and produced nectar and pollen
- **For 50 – 25 Million Years**
 - Solitary bees had existed, also early primates
- **For 20 to 10 Million Years**
 - Social bees have produced and stored honey
- **For a few Million Years**
 - Man has existed and has eaten honey
- **For a few Thousand Years**
 - Records exist of man's exploitation of honey

The Three General Historical Stages of Beekeeping

- **BeeHunter/Gatherers**
- **BeeDomesticator**
- **BeeKeepers**

BeeHunter/Gatherers

- **Survival –
Seek out and
rob wild bee
colonies**
- **No regard for
the survival of
the bees**



BeeHunter/Gatherers

Early rock paintings on cave walls in Africa and eastern Spain show people gathering honey with beezzz a buzzin'.



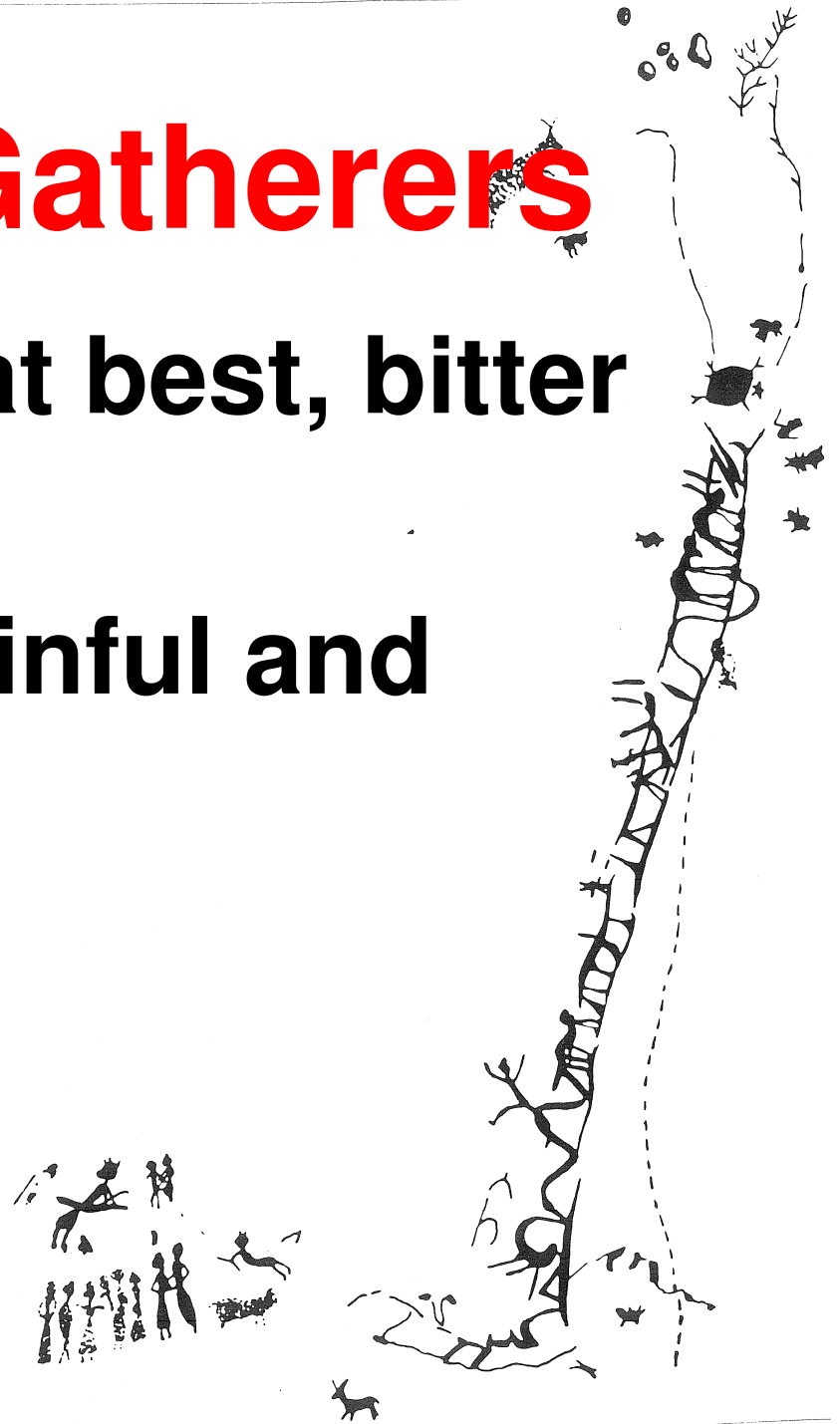
Man of Bicorp

Discovered - early 1900's in Valencia, Spain

Estimated - 8,000 years old

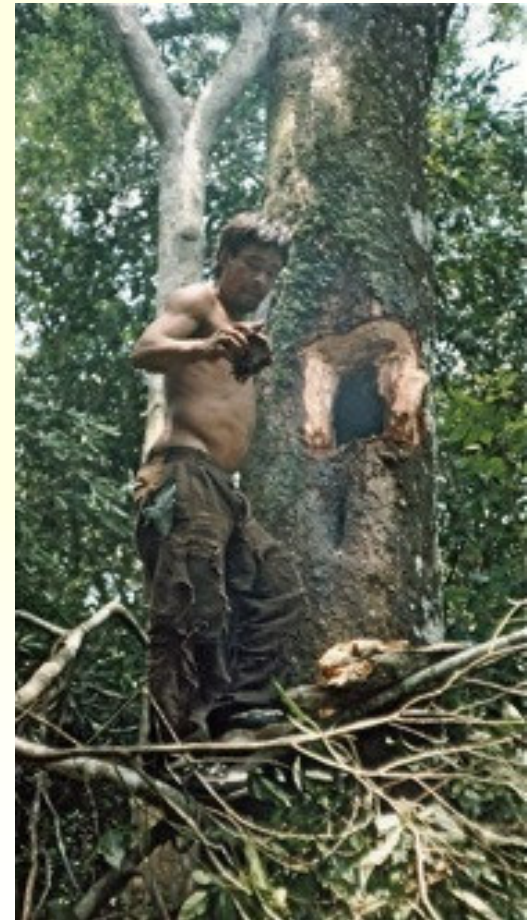
BeeHunter/Gatherers

- All food is bland at best, bitter at worst
- Honey harvest painful and dangerous



BeeHunter/Gatherers

- Techniques still used today



BeeHunter/Gatherers



The Three General Historical Stages of Beekeeping

- **BeeHunter/Gatherers**
- **BeeDomesticator**
- **BeeKeepers**

BeeDomesticators

- At some point, humans began to domesticate wild bees in artificial hives made from hollow logs, wooden boxes, pottery vessels, and woven straw baskets or "skeps."



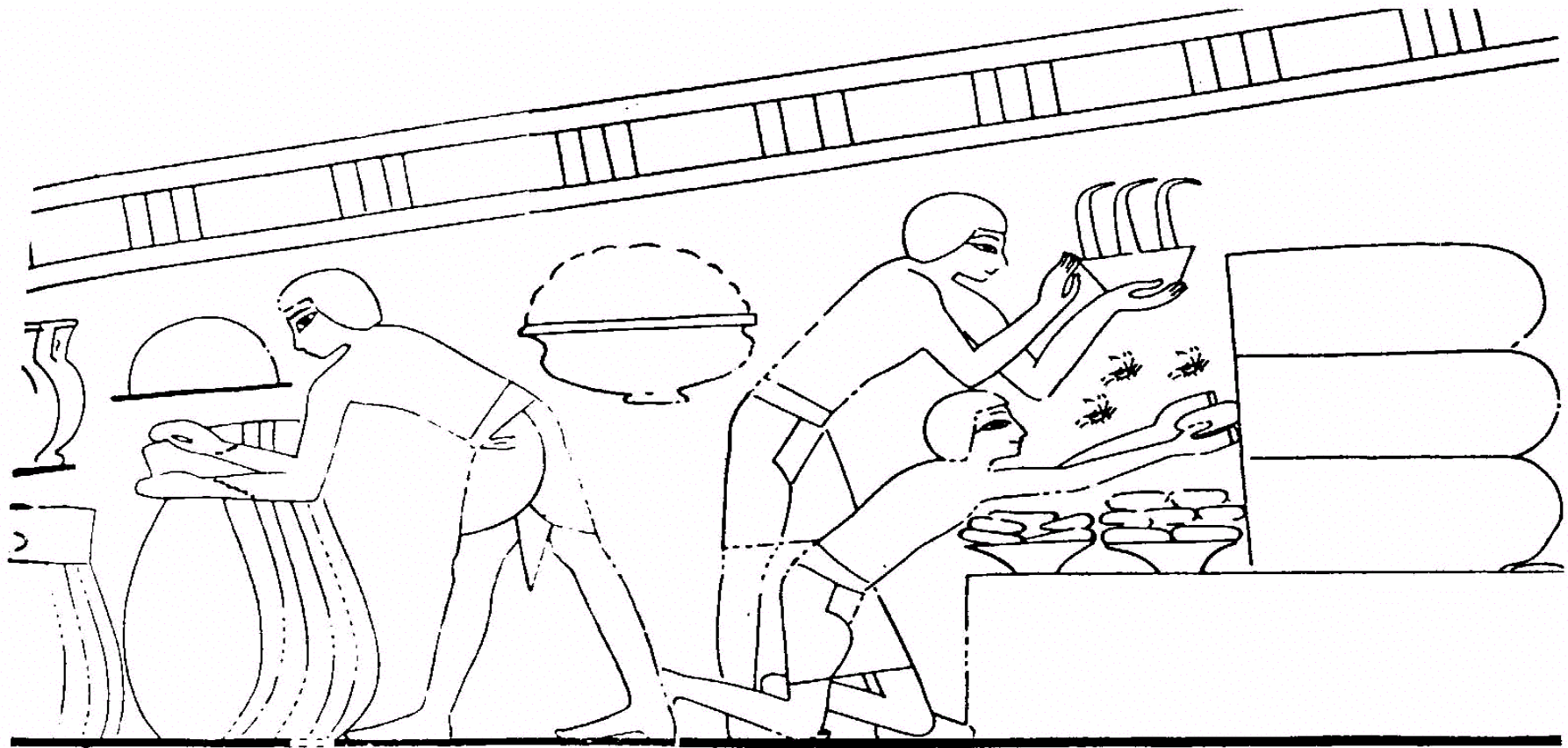
BeeDomesticators

- In 3000 B.C., there are written records of migratory beekeeping up and down the Nile river in ancient Egypt.



BeeDomesticators

- Egyptian hieroglyphics – 2400 BC



The Bible

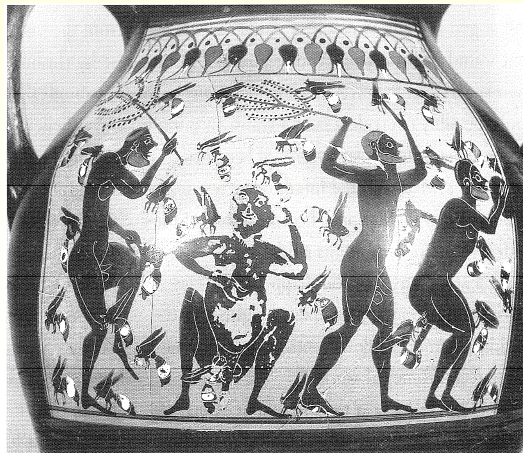
- In Exodus, Cannan is referred to as “The land of milk and honey.”
- King Solomon: "My son eat thou honey, because it is good, and the honeycomb which is sweet to thy taste".
- Samson : “..and he turned aside to see the carcass of the lion: and, behold, *there was* a swarm of bees and honey in the carcass of the lion.”

Egypt 660 B.C.

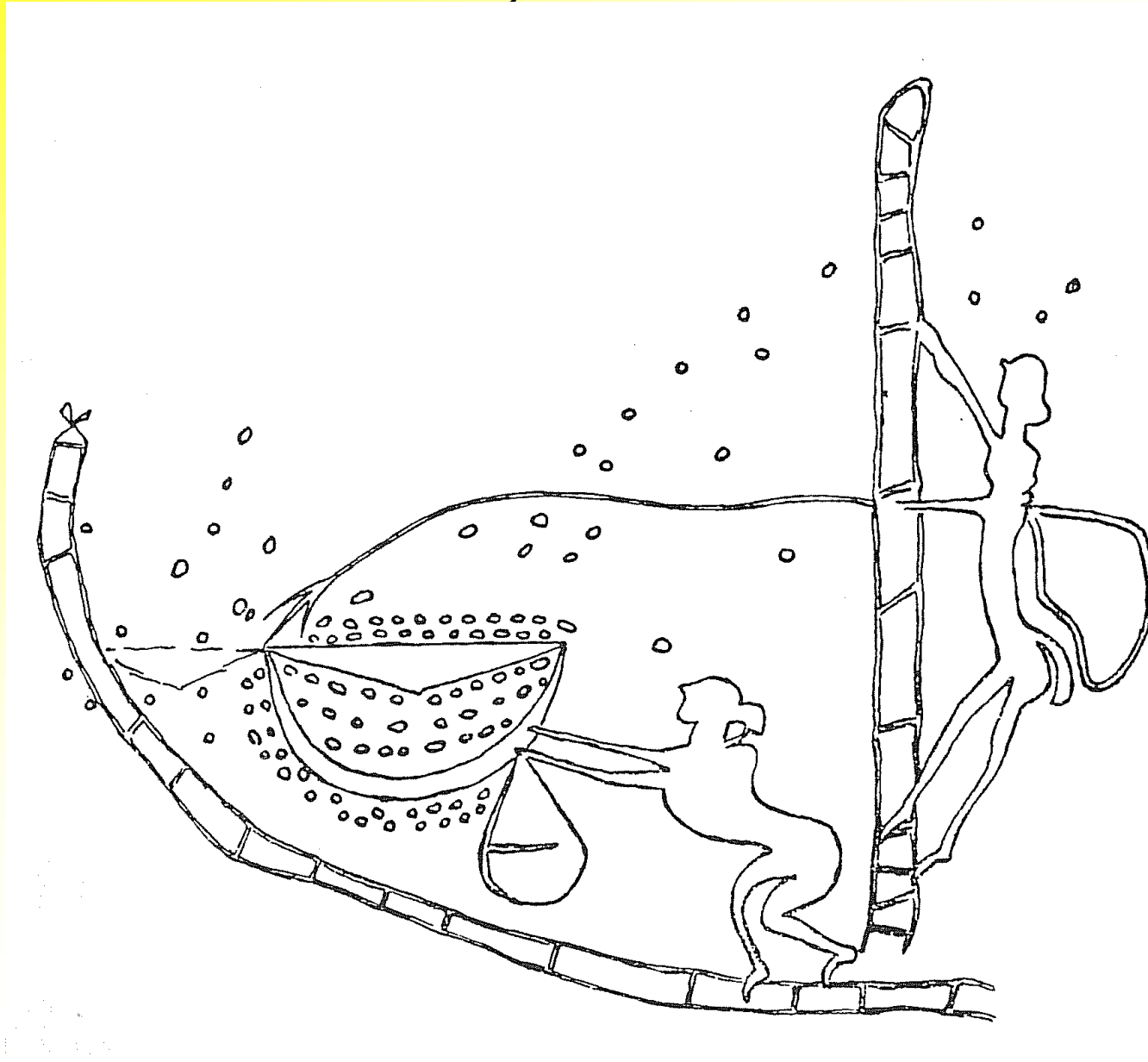


BeeDomesticators

- 1,700 to 2,500 years ago, Greek and Roman civilizations flourished
- Greek and Roman mythology often mentioned bees or honey.
- Aristotle, Plato, and many other philosophers wrote about bees



India, 500 B.C.



BeeDomesticators

- **Africa – South Africa**
- **Asia...**
- **Mayans – Stingless bees**
 - **Oldest New World Beekeeping artifacts – 300B.C. to 300 A.D.**
 - **Mayan Bee God - “Ah Mucan Cab”**



BeeDomesticators

- **However....**
- **Hives were plundered without an understanding of the life cycle of the bee or the structure of the hive.**
- **Typically, bees were killed in the fall and the contents of the hive consumed.**

BeeDomesticators

- **In these early days:**
 - **Human understanding of Bee biology and ecology of bees was very limited and,**
 - **Riddled with superstition and folklore. Ancient observers thought that the queen bee was in fact a male, called "the king bee".**

BeeDomesticators

- **Additionally....**
- **One could not observe bees inside a skep or log!**
- **They did not understand beespace, bees would build comb everywhere...**
- **Had to cut it out...**



0 to 1400 A.D.

- **Rome declining (300 A.D.)**
- **Fall of Rome (450 A.D.)**
 - Travel Unsafe
 - Knowledge not easily disseminated
- **Dark Ages**
 - No written history
 - No major achievements
- **Black Plague 1350 (75 Million Dead!)**
- **Beginning of the Renaissance (1400_{ish})**
- **Printing Press 1450**
- **Monks**

Medieval Handbook on Health



The Three General Historical Stages of Beekeeping

- **BeeHunter/Gatherers**
- **BeeDomesticator**
- **BeeKeepers**

Beekeeping Defined

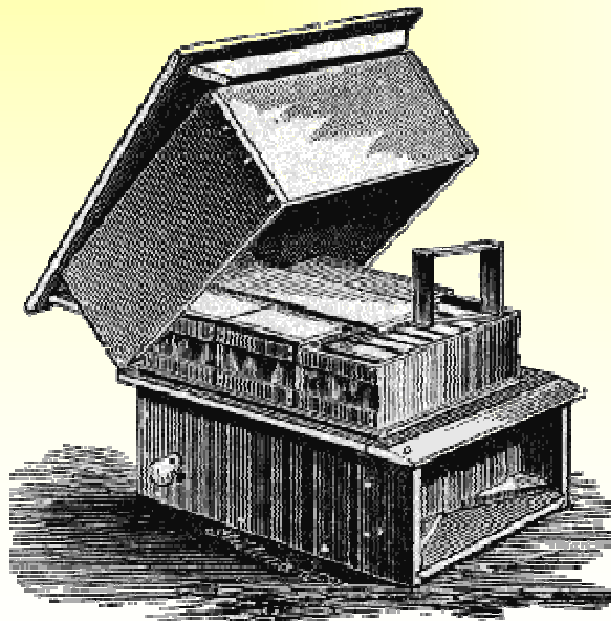
Beekeeping (Apiculture) is the practical management of the social species of honey bees that live in large colonies.



- **Over 20,000 species, many are solitary or rear their young in small colonies**
- **Genus – Apis**
 - **Species**
 - **Dorsada – Asian, Large, Single Comb, Outside Dwelling**
 - **Florea – Asian, Small, Single Comb, Outside Dwelling**
 - **Cerana – Asian, Small, Parallel Comb, Cavity Dwelling**
 - **Mellifera – Africa/Europe/Mid-East, Parallel Comb, Cavity Dwelling**

BeeKeepers

- Beekeeping changed most between 1500 and 1851



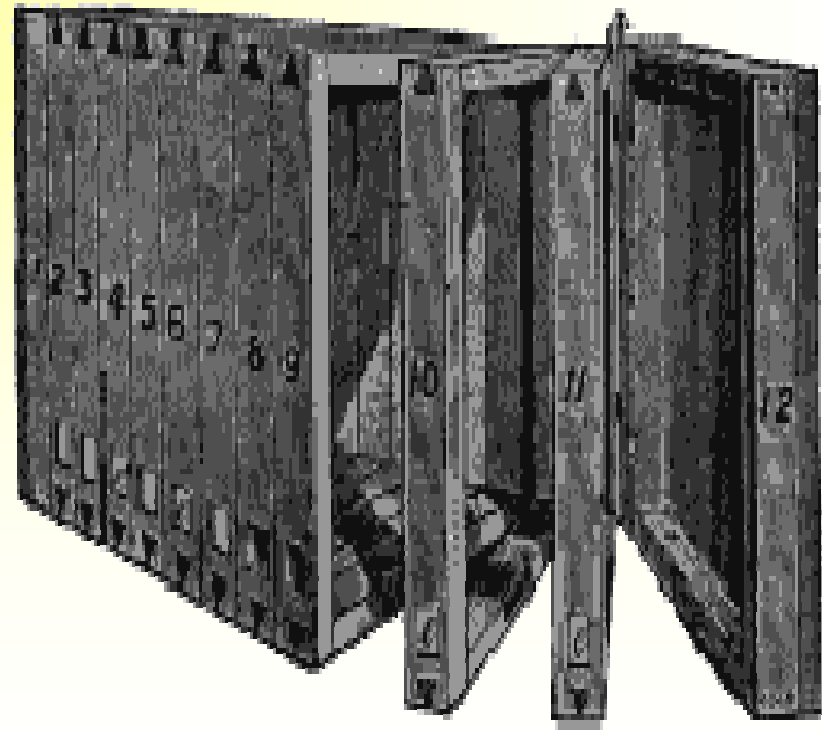
The original Langstroth hive.

BeeKeepers

- Science weighs in:
 - The first revolutionary discovery involved understanding the life cycle of the bee. In 1586, **Luis Méndez de Torres** - Spain - first described the queen bee as a female that laid eggs.
 - In 1609, **Charles Butler** - England - identified the drones as male bees.
 - In 1637, **Richard Remnant** - England - recognized that the worker bees were females.

Francis Huber (Sweden)

- Father of Modern Bee Science
- Fully movable frame, Leaf, hive 1789
- Observations on Bees
- Queen mating practices and role of Drones



Dr. Johann Dzierzon (Poland)

- **Discovery of parthenogenesis in Queen bees 1835.**
- **Devised the first practical movable-comb beehive, 1838**
- **Discovery of Royal Jelly and its role in Queen development 1854.**



Rev. Lorenzo Lorraine Langstroth

(1810 – 1895)

“Father of American Beekeeping”



Yee Haw! 1851

L.L. Langstroth clarifies *bee space*, the 3/8 inch needed between frames for bees to build comb.

The Langstroth Movable Frame Hive is the first and most important invention in creating a commercial beekeeping industry.



History

- 1800s - Commercially Viable
 - Moveable Frame Hive
 - Smoker
 - Comb Foundation Maker
 - Honey Extractor
 - Protective Clothing



1900's

- **Breeding Honeybees**
- **More Scientific Studies/ Labs Open**
- **More interest in Beekeeping**
- **Commercial Businesses grew**



2000's

- **Increased public awareness of the critical role that Honeybees play in the ecosystem and their role in pollination of food crops!**
- **Increased literary interest in Bees and Beekeeping as evidenced by the success of 'The Secret Life of Bees', 'The Beekeeper's Apprentice', etc.**

American Beekeeping History

- **Honey Bees Not Native to the U.S.**
- **Bees/Beekeeping skills to the New World**
 - **Early 1600s – Human Assisted Migration to the Colonies**
- **By the 1800's – Honey Bees distributed from the East Coast to the Mississippi River**
- **In Kansas – early 1800s**

American Beekeeping History

- Human Assisted Migration
 - 1644 – Connecticut
 - 1670 – New York (Long Island)
 - 1698 – Pennsylvania
 - 1730 – North Carolina
 - 1743 – Georgia
 - 1773 – Alabama
 - 1780 – Kentucky
 - Ohio – 1788 and Illinois - 1820





- **The U.S. Honey Bee population is declining:**
 - **1947 - 5.9 million colonies**
 - **Today – about 2.5 million**
 - **Why?**
 - **Colony Collapse Disorder**
 - **Pesticides**
 - **Mites**
 - **Fewer Beekeepers...210,000 in U.S.**



Kansas Beekeeping

- A great place for Honey Bees!
- Kansas Beekeepers = 1,500 +-
• 30,000 colonies
- Northeast Kansas Beekeepers Association
- Kansas Honey Producers Association



Summary

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Questions?

