



Fiji's Beekeeping Mentor Program



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Apimondia Congress Montreal, Canada September 2019



Fiji

A small Pacific island nation

- Population: 906,000 (2017)
- 330 islands, 100 inhabited
- 18,000 km²
- Tropical wet/dry seasons
- A developing economy



Fiji Beekeeping History

- Early British colonists brought the black bee (*mellifera mellifera*) in the 1800's
- Beekeeping developed with foreign assistance from Australia, New Zealand, EU, USA, and Japan
- Today, bees are a crossbreed of the black and Italian bee



Fiji Beekeeping Today

- Approximately 800 beekeepers managing 17,000 Langstroth hives
- Twenty beekeepers with 100+ hives
- 90% self-sufficient in honey. Prices near world market prices
- 35% colony losses from category 5 Cyclone Winston in February 2016
- High interest in beekeeping
- First varroa found in 2018
- Constraints: Technical and business skills



Beekeeper Skills Assessment

- A survey of 314 beekeepers

- 32% do not know how to split colonies
- 45% do not know how to raise queens
- 28% throw their beeswax away
- Needless loss of comb to wax moth
- Honey quality problems
 - High Moisture
 - Molasses flavour

* Survey by Secretariat of the Pacific Community, 2016. Cyclone-affected areas only. Represents 6,485 bee colonies, approximately 40% of Fiji's total.



Fiji Beekeepers Association

Working to increase beekeepers' honey production and grow related businesses

- Skills development
- Beekeeper networking
- Representing the interests of all beekeepers
 - Government policy
 - Development agencies

Active since 1998 with volunteer leadership.



Beekeeping Mentor Program: Inspiration & Concept

- Most successful beekeepers began with help from mentors
- Beginning beekeepers are paired with experienced local beekeepers
- Mentors teach a prescribed set of beekeeping skills during a 12 month period
- EU-funded through International Trade Centre



Beekeeping Mentor Program

- Mentors are compensated with hive equipment
- Hive equipment is also provided to trainees to develop skills in hive assembly and splitting colonies.
- Pre- and post-mentoring profile metrics and interviews to measure impact



Beekeeping Mentor Program First Year Participants

13 Mentors

- Median years experience - 16
- Median hive count - 94

20 Trainees

- Median years experience - 2
- Median hive count - 6 (plus 1 dead)
- 18 men, 2 women
- Most needed skills - Bee breeding, disease identification, and feeding bees



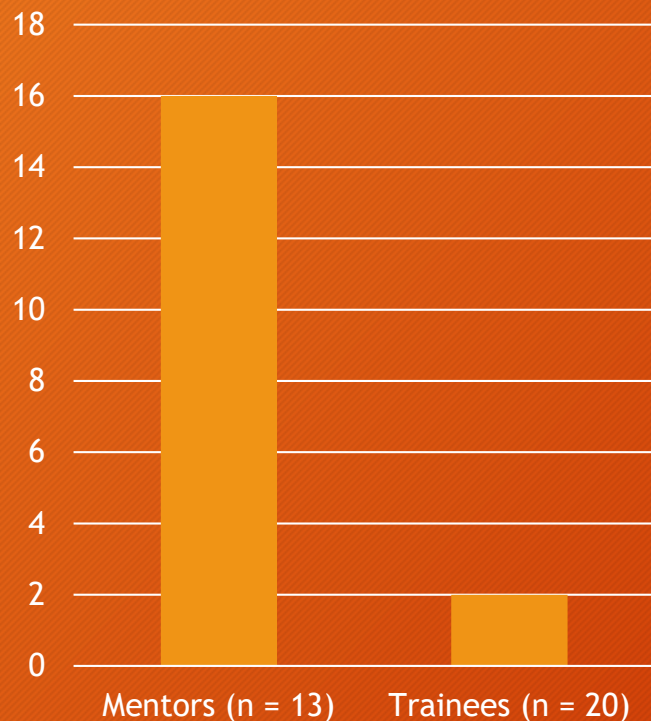
From a Donor's Perspective. . .

- Nearly 100% of funding directly increases honey production - beehives
- Equipment provides incentive for mentors
- Good statistical metric reporting: Mentor and trainee profiles, pre- and post-surveys on hive numbers and honey production
- Results in one year
- Uses LOCAL knowledge
- Simple one-time up-front purchase of equipment - low fraud potential
- Program was designed by beekeepers

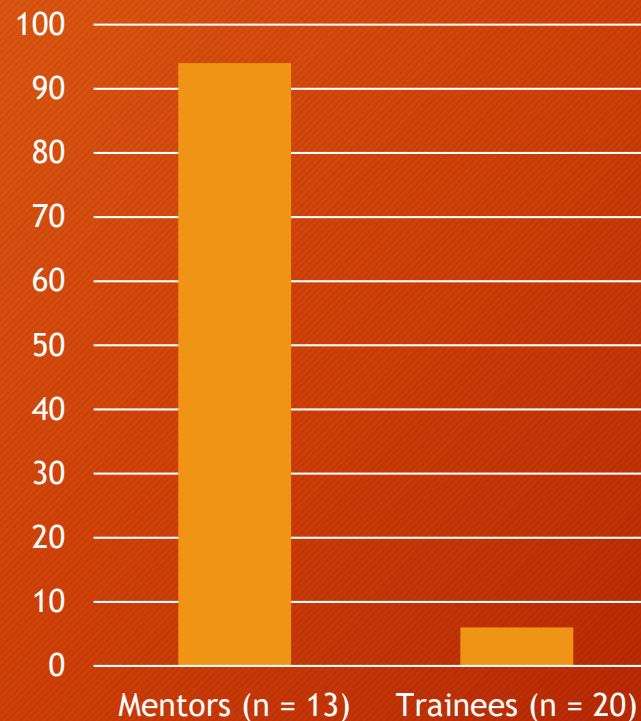


Mentor and Trainee Profiles

Years of Beekeeping Experience (Median)

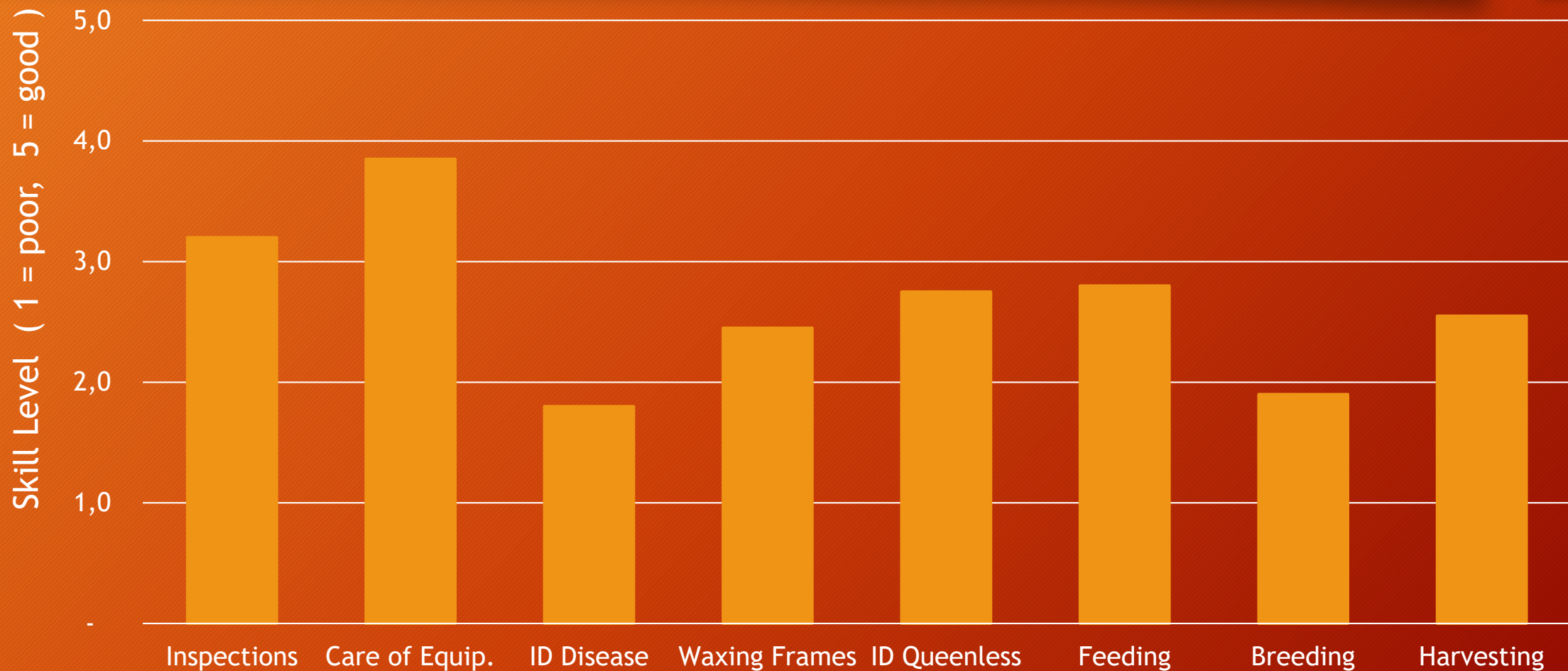


Number of Bee Hives (Median)



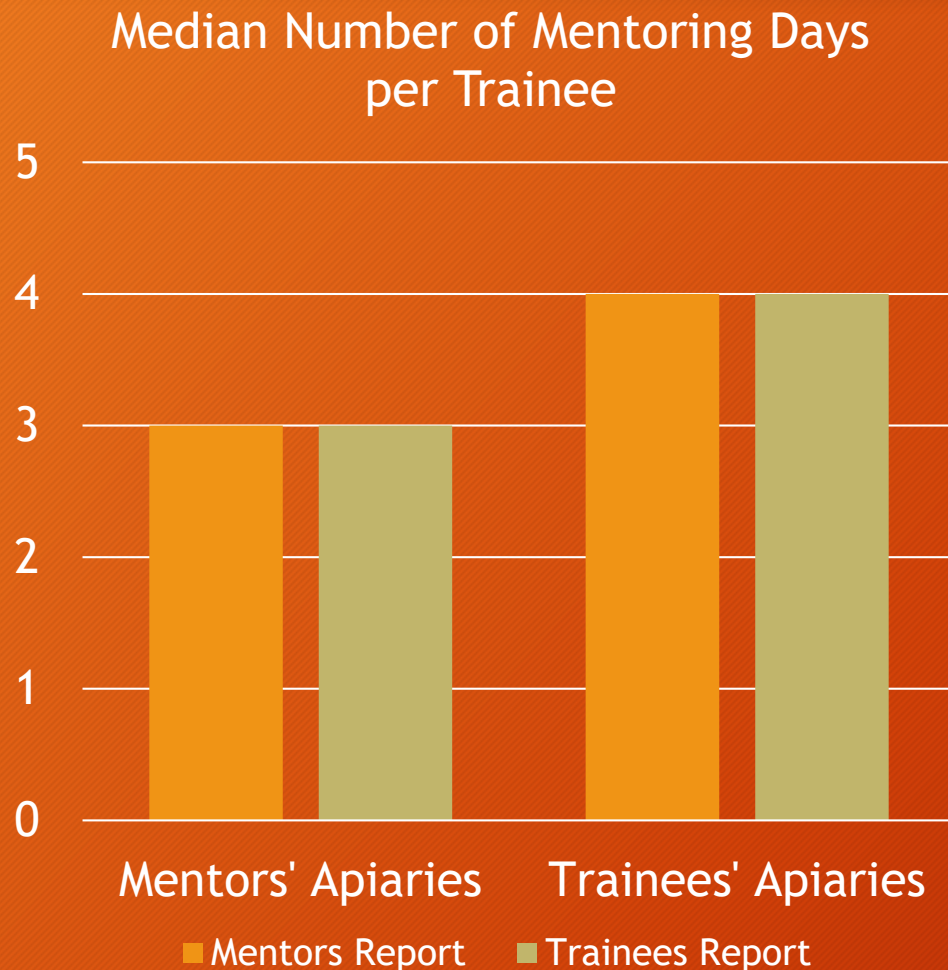
Data from program application forms, December 2015

Trainee Skills Self-Assessment



Data from program application forms, December 2015

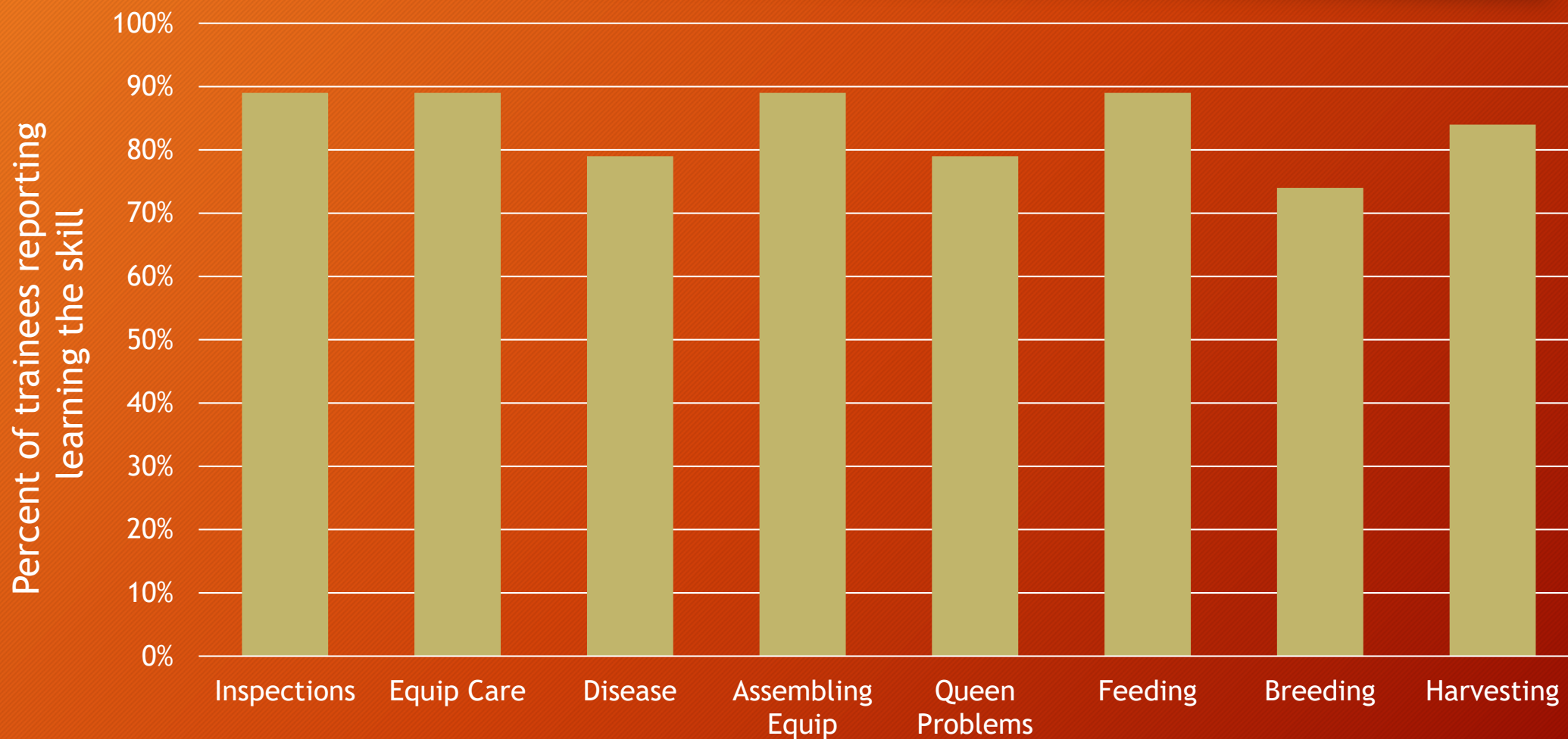
Year-end Review - Mentoring Activity



Of the 13 mentors . . .

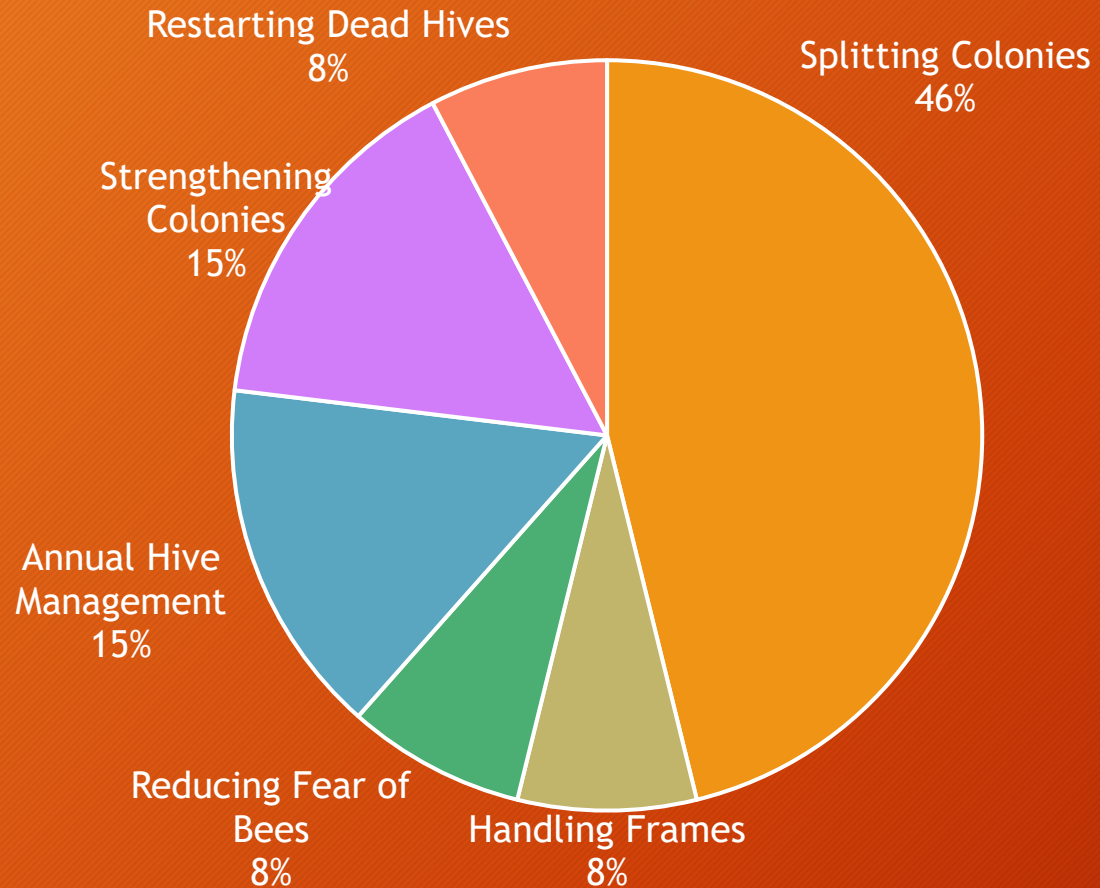
- Ten fulfilled mentoring requirements satisfactorily
- Two would have benefitted from better monitoring and coaching
- One non-performing

Year-end Survey - Skills Learned



Most Valuable Skill Learned from Mentors

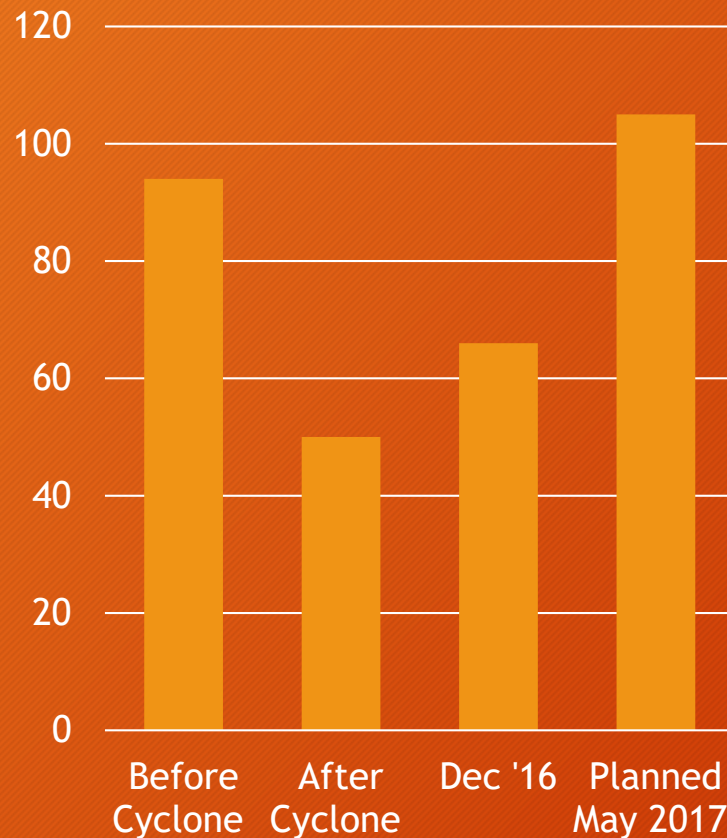
Trainees Reporting



Hive Count Trend

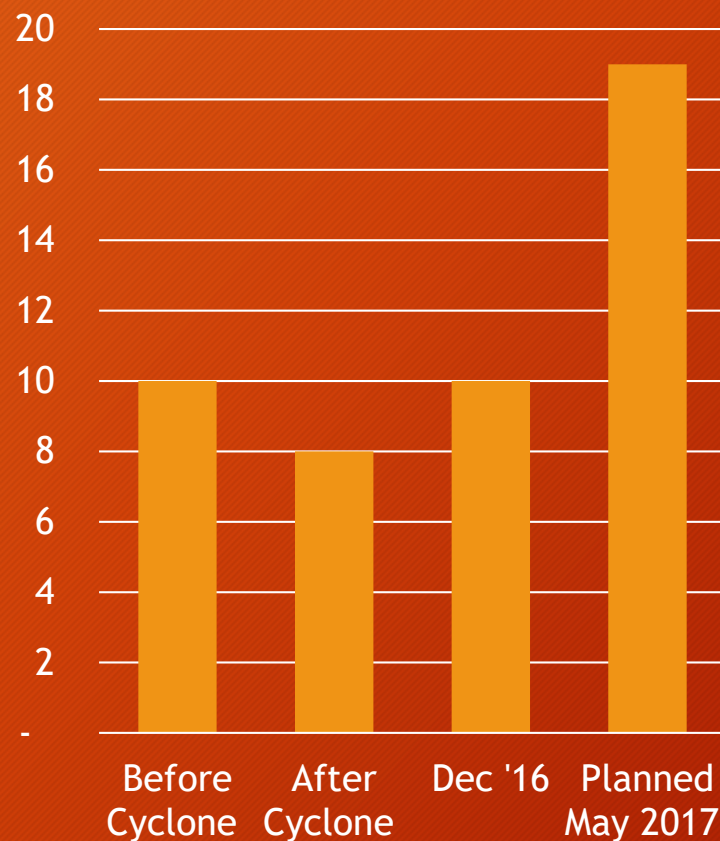
Mentor Hive Count

Average, n=13



Trainee Hive Count

Average, n=20



Nineteen out of twenty trainees plan year-over-year increases in their hive numbers

The one who is not increasing hives is a widow who inherited her husband's 40 hives

Twelve of the twenty trainees plan an increase greater than the hives provided in this project

Factors Influencing Mentoring Success

- Selection of mentors
- Pre-existing relationships
- Geographic distance
- Monitoring and coaching



All ten successful mentors expressed an interest in mentoring again

Recommendations from Participants

- Require quarterly reporting by mentors
- Mentor and trainee materials:
 - Include beekeeping videos in addition to a book
 - Advanced beekeeping book for mentors
 - Deliver some mentor materials at year-end, after performance
- Deliver training classes for trainees (especially queen-rearing) in conjunction with the Mentoring



Thank You!

