

Fishing for Bees Swarm Traps Bait Boxes

The Social Responsibility of Being a
Beekeeper

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Fremont
2017

Swarm Trap Bait Hive Bait Box



EVERYBODY STOP!
...I THINK IT'S A TRAP!

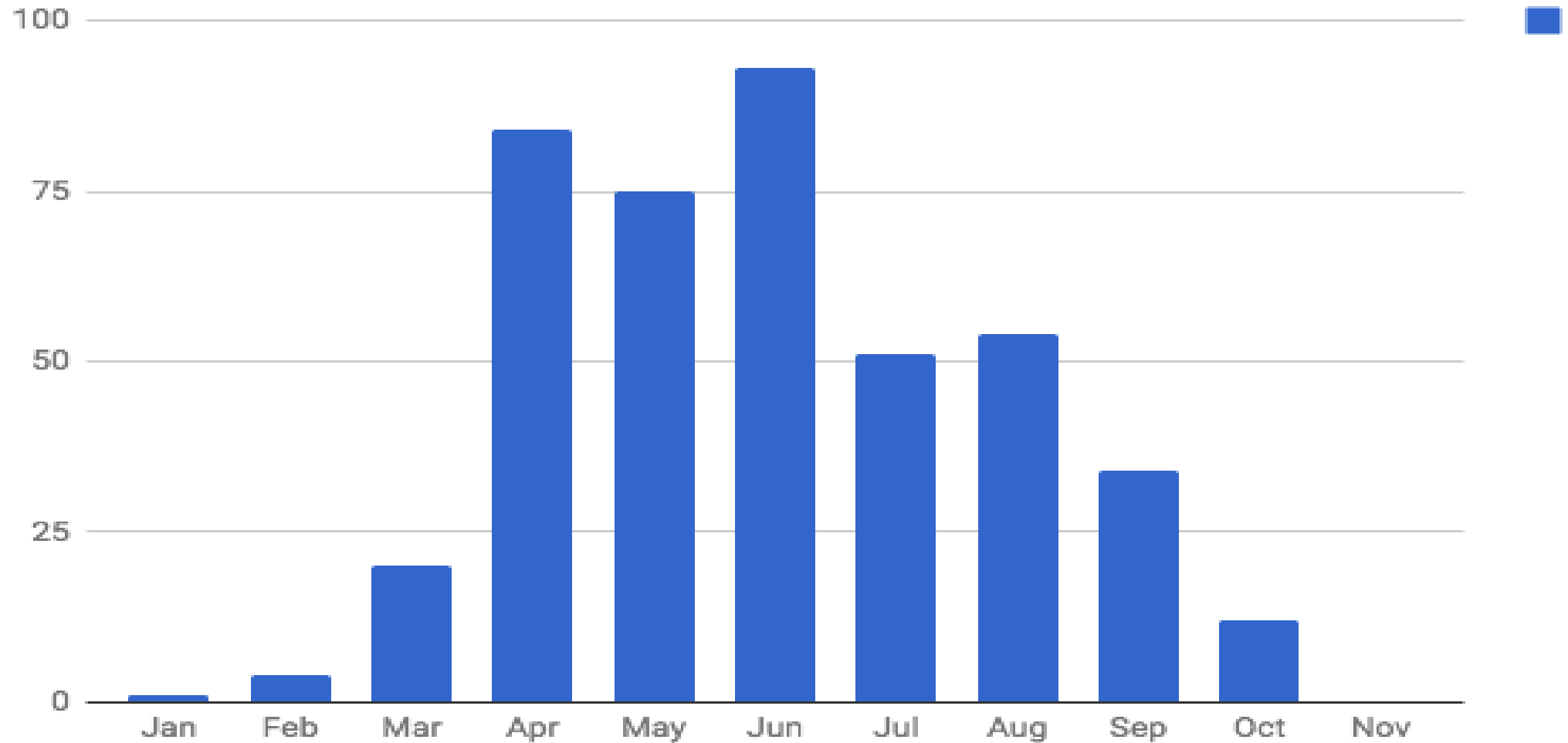
Why do Swarm Traps?

- FREE BEES!!
- Socially responsible
 - If I did not catch that dozen of swarms in my yard last year, where would they have ended up?
 - If you keep bees, you should set up just as many swarm traps as you have active hives. (or more)
- Survivor Stock
 - Feral, or otherwise, they will have more diversity, and local traits than anything you can buy.
- Foster / Bolster the beekeeping community
 - Grow your apiary
 - Make new beekeepers
 - Sell them
- What else are you doing with your used equipment? Get it out there!!
- Catch them while you are doing life. No chasing required. (but that's fun too)
- Swarm Trap, or Swarm Chasing Kit – Same Same

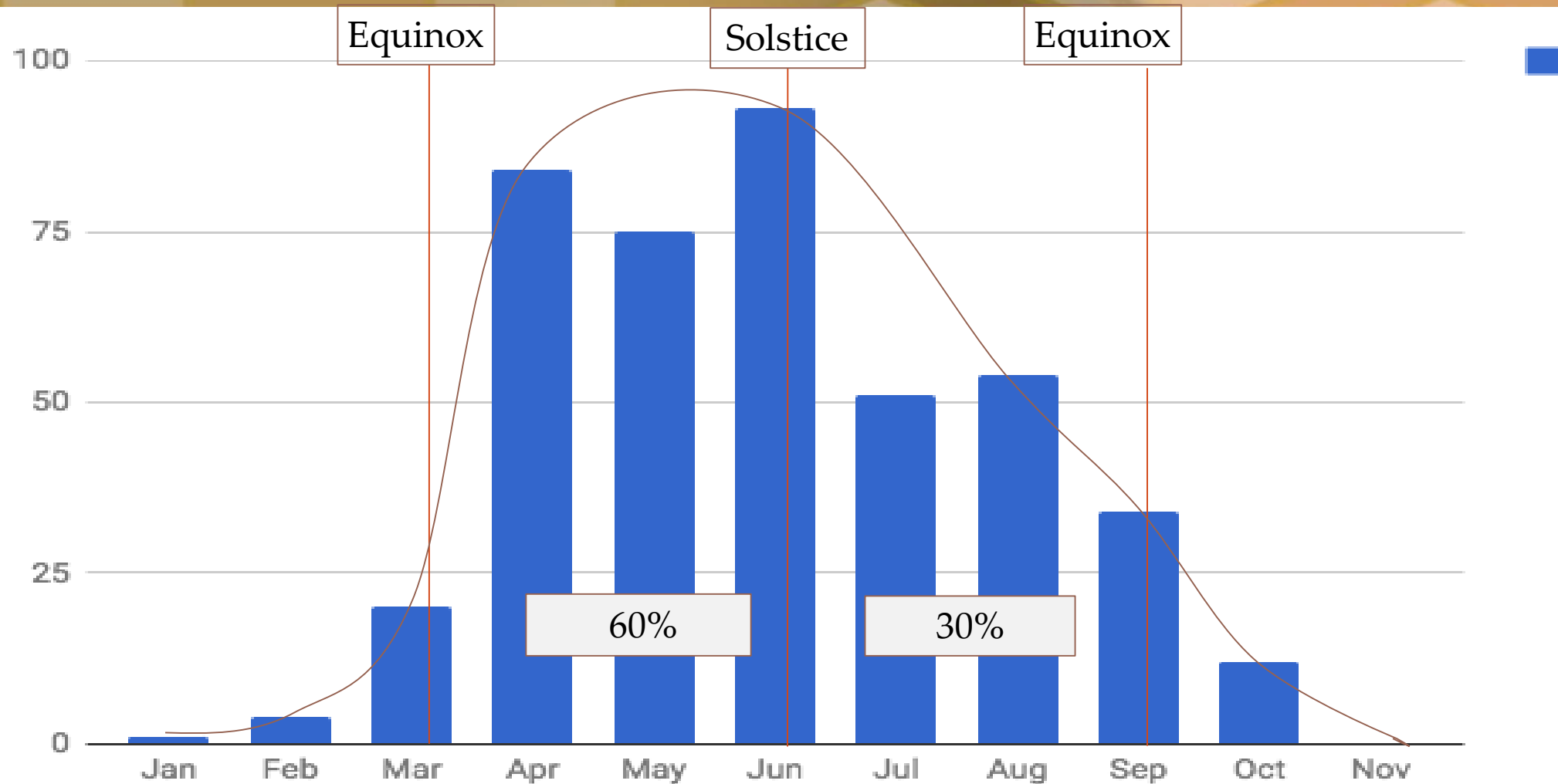
Timing, and weather – it's all fishing

- First warm weekend, usually in March.
 - I caught 8 total in 2015
 - 10 in 2016
 - 18 in 2017
- Latest I've caught a swarm was October.
- ACBA Swarm List for 2017
 - 430 calls total
 - 206 swarms reported
 - 166 extractions

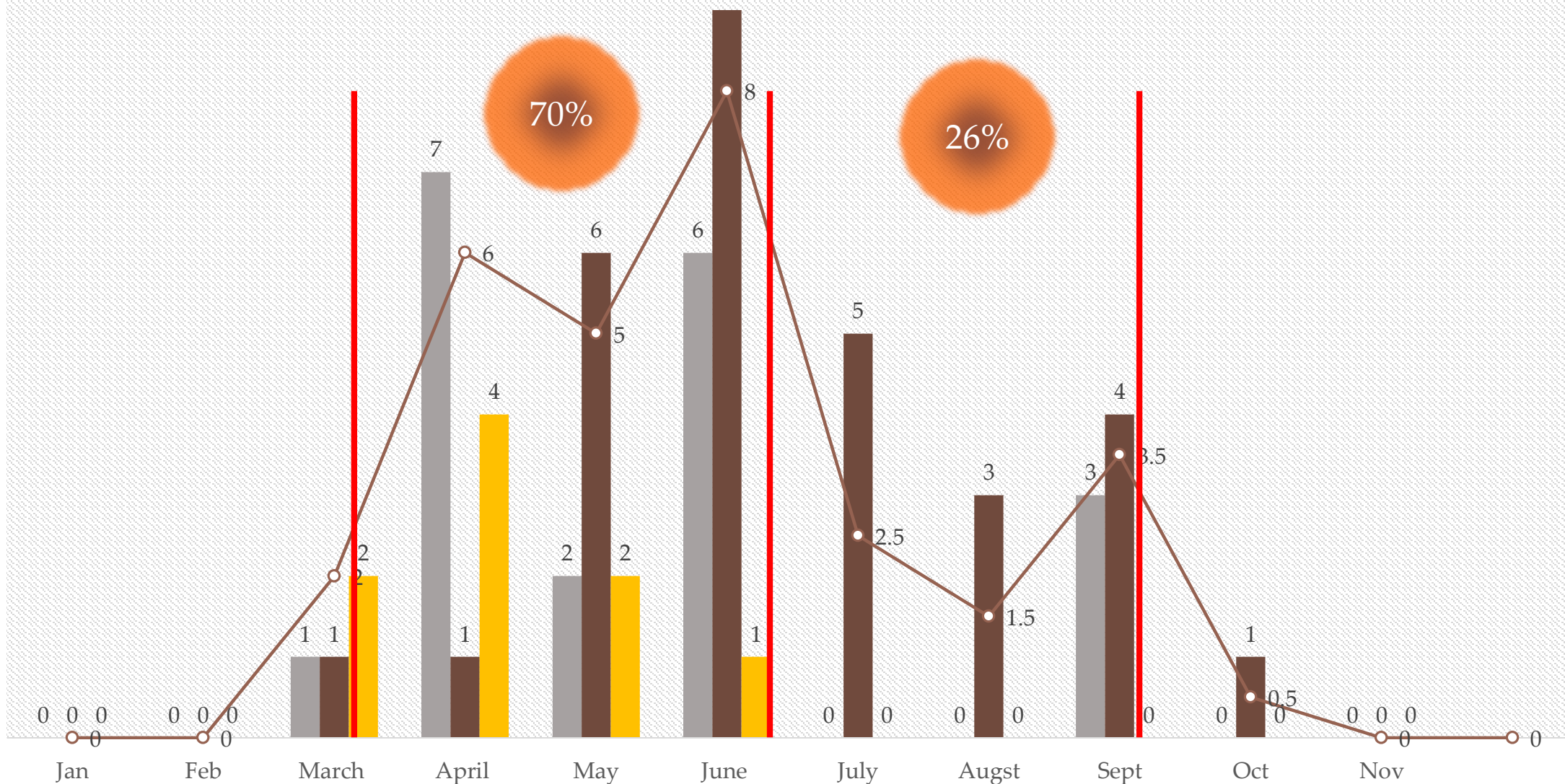
ACBA Swarmlist Calls for 2017



ACBA Swarmlist Calls for 2017



Swarms and Traps 2017



■ PS Swarm Traps

■ Sung Chasing

■ Tim Menlo

—○— Trend

Scouting

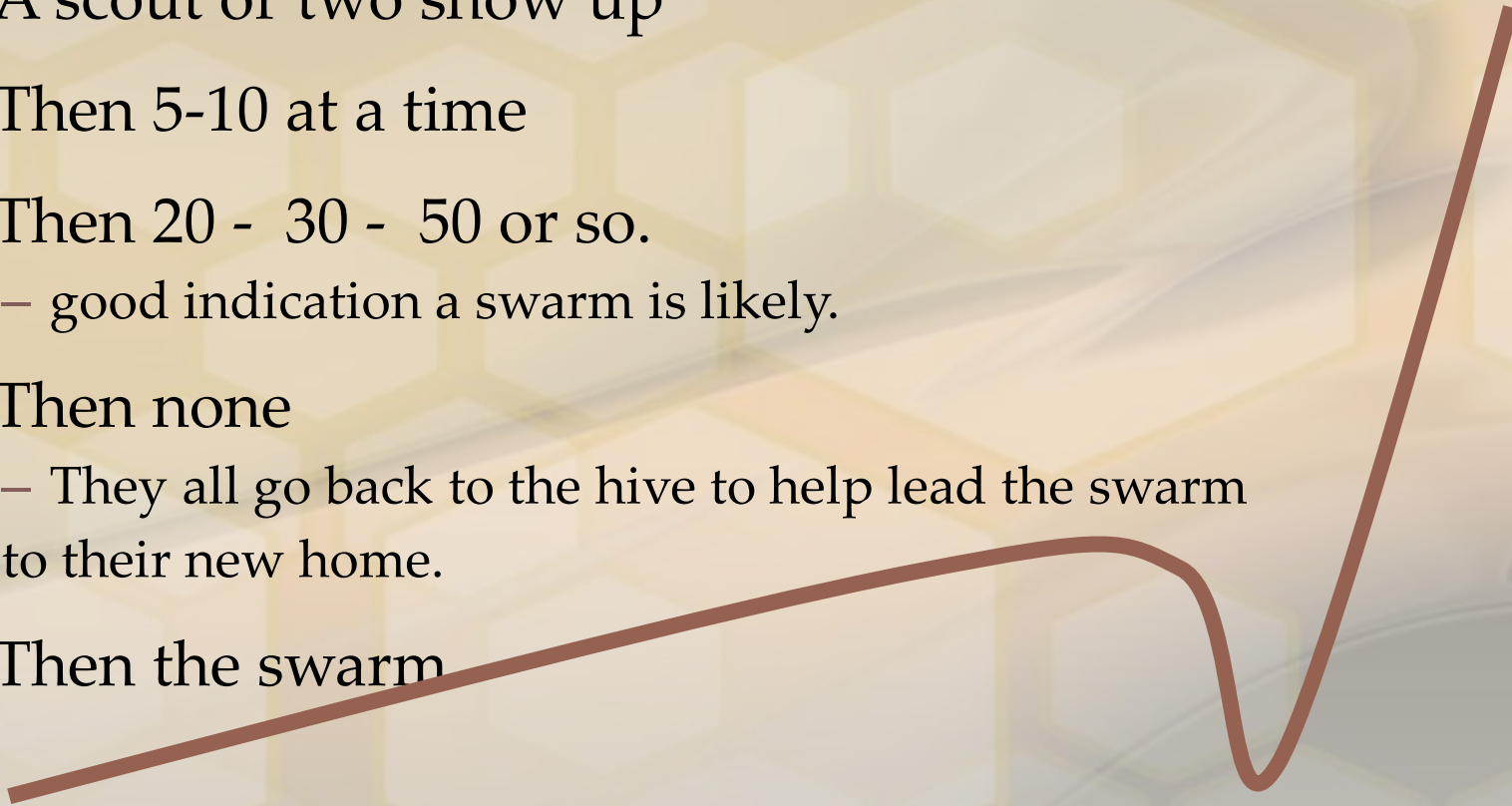
- Who finds the New Place?
 - All scouts
 - Even when they aren't going to swarm, the scouts check out possible locations
 - When they are preparing to swarm, then the scouting becomes more prevalent
- When do they start scouting?
 - They are always scouting - I have seen scouts on my boxes in November, and on New Years Day
 - In earnest when the hive starts preparing for swarming. Up to 4 weeks ahead
 - More heavily when the queen cells are capped
 - Like crazy when the swarm has left the hive

The House Shopping Ritual

- Attracted by a dark hole and the scent
- Inspects inside the box for adequate space
- Inspects for lack of water, light and draft
- Inspect for defendable entrance
- Inspects the outside of box
- Spends a bit of time on the porch, getting their bearings
- Lots of socializing on the front porch, sometimes a bit of tussling with competing colonies. Spends several minutes checking it out

The Tsunami affect

- A scout or two show up
- Then 5-10 at a time
- Then 20 - 30 - 50 or so.
 - good indication a swarm is likely.
- Then none
 - They all go back to the hive to help lead the swarm to their new home.
- Then the swarm



3 Legged Stool of Swarm Traps

Scent

Accommodation

Location

SCENT

SCENT SCALE	Type of SCENT
High Notes	Lemon Grass Oil ~ Nasanov mimic
	Swarm Commander- Swarm Lure
Medium Notes	Queen pheromone
	Propolis
	Wax
	Old Wood
Low Notes	Black Comb

3 Legged Stool of Swarm Traps

Scent

Accommodation

Location

Accommodation

- Comb to lay in immediately (cross over with Scent)
 - Eggs in comb will secure your swarm pretty much.
- Open space for them congregate, and to grow into
 - ~40 liters = 8 frame deep box - Seeley
 - Std. 10 Frame Deep Box will do fine too.
 - Doubled up medium or shallow boxes work too.
 - Swarm Traps such as Swarm Trooper.
 - Foundationless frames
 - Lots of ways to make them.
- Dark and air tight
 - Seal up cracks and gaps
 - No screened bottom boards
- Defendable entrance
 - 2 Inches square or so.
 - Hole, or standard reducer
 - Steel wheel, or other entrances (Spehar)

Accommodation (continued)

- Dry
 - Telescoping Lid
 - Large Plywood top
 - Up off the ground
- Partial Shade – Goldilocks temperature (cross over with Location)
 - Not too hot, not too cold, or damp.
 - Morning sun to warm up the box improves the scent, and dry out the box.
- Level - Left to Right
 - Draw straight comb
 - Slight tilt to the entrance to drain any water that may enter.

3 Legged Stool of Swarm Traps

Scent

Accommodation












Location

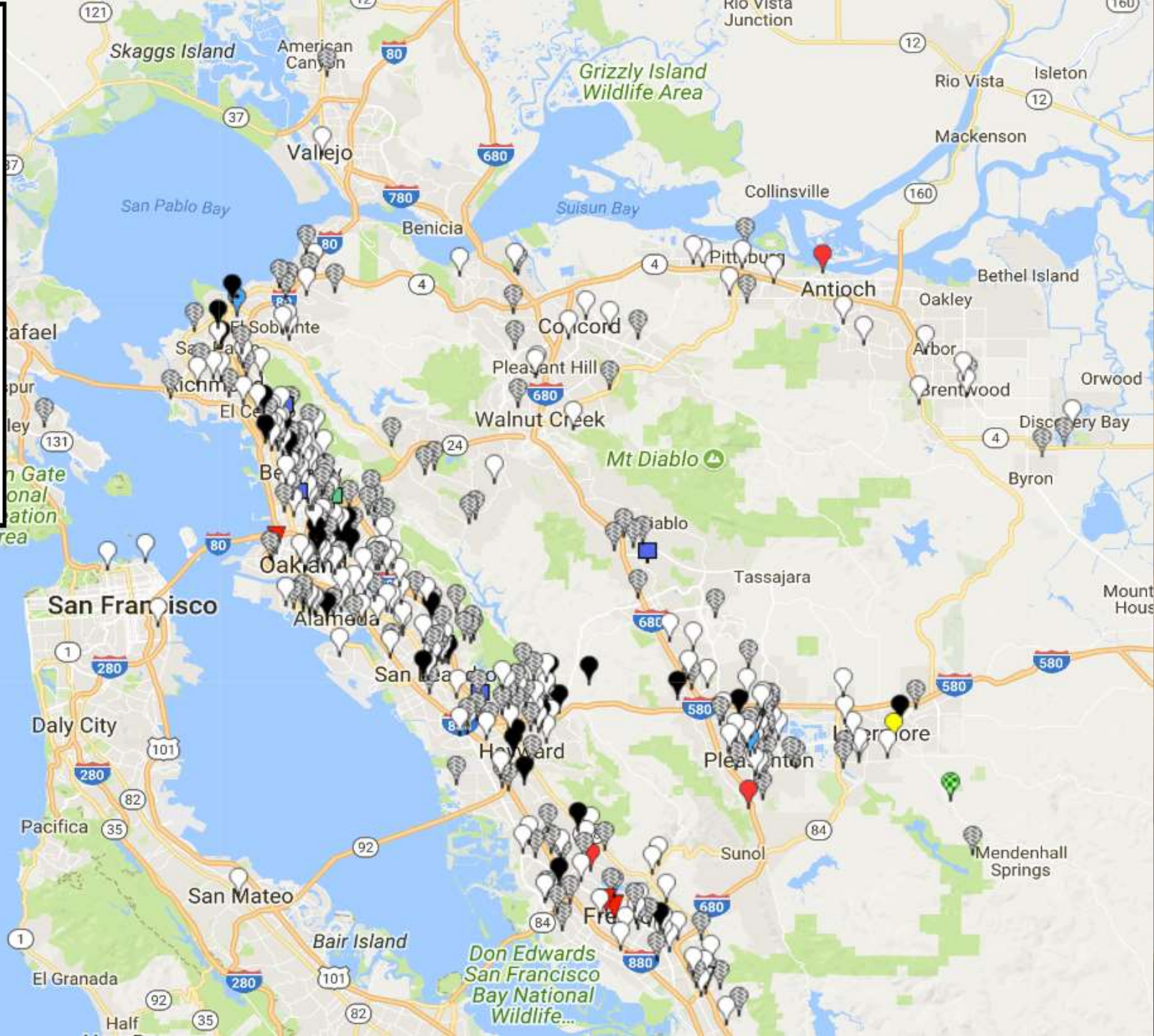
Location, Location, Location

- Where the Bees are, my swarm waits for me.
 - Can't catch bees if they aren't there in the first place.
 - Look at where they are feeding
 - Look for travel paths – Beelining – Seeley
 - Stack all your old boxes in the same place, and put a trap near by.
 - Look at the history of swarms in the area.
 - Be a member of the Swarm list, if nothing else to see what is happening in your neighborhood.
 - Ask neighbors if you can put up a swarm trap in their yard.

Swarmslist for 2017

Go fishing
where they
are biting

Icon Key	
	(4)
	Bait (1)
	Bee Tree (3)
	Bumblebees (5)
	Ext (166)
	Foraging (4)
	Native bees (1)
	Paper Wasp (1)
	Relo (4)
	Rescue (1)
	Swarm (206)
	Wasps (3)
	Yellowjackets (32)



Location

- An Easy to find (again) location (for the bees)
 - If a scout finds it, they need to tell others where it is.
 - Landmarks such as:
 - Large Tree
 - Corner of a fence or hedge row
 - Corner of a house.
 - Look on Google Maps. Can you see it?
- Entrance down wind
 - Scent travels further
 - Scent lasts longer in the hive
 - Scent in the hive is stronger
 - Air in the hive is more still

Location

- Height 3 ft to 20 ft.
 - Ladders are not recommended, but useful. Use ropes for high hive boxes.
 - Top of sheds works well
 - 2nd story decks work well
- Stable and Still (Cross over with Accommodation)
 - No branches rubbing on the hive body.
 - If hanging, the hive box shouldn't swing and bang against the tree or building.
 - Little to no vibration.
 - On top of the kid's room is probably not good.
 - Bees don't care about noise, but are sensitive to vibration

Side Notes

- A full complement of frames (8 or 10) Swarms build up FAST!!
- Level left to right. Slight tilt to opening.
- Secure the frames so they don't shift when carrying.
- Affix your bottom boards. Screw on, or use hive staples.
- Easy to affix lid. Don't want lose bees when on a ladder, but want to check them.
- Easy to close up entrance. Figure this out before you set your traps.
- Only one frame of black comb needed. Reduces wax moth invasion.
- Add a feeder, or some way to easily feed them when they show up.
- Easy to carry down a ladder and into a vehicle.
- Figure out your strapping method when the box is empty.
- Straps make it easy to lift and carry a full box without fear.
- Re-set the trap as soon as possible. Two or more colonies may have been scouting it.
- More traps are better. Spread them around town

Order of Frames

1. Feeder (furthest from the entrance)
2. Full foundation, maybe yellow comb
3. Black comb, full frame
4. Full foundation, maybe yellow comb
5. Foundationless, maybe partial
6. Foundationless
7. Foundationless
8. Foundationless
9. Foundationless
10. Foundationless

Nice quiet air, easy to control the temperature, and maximize the queen's scent.

Plenty of room for the swarm to congregate, and smell each other and the Queen. Good convection of heat, moisture, scent.

Entrance

Frames

- Kelley F frames are my choice. I build them and leave them out in the rain for a bit to weather them. Get a bit grey. \$1 ea.@100
- Starter strips of wood or wax is good. Older frames are better.
 - Put in full starter strips.
- Avoid plastic, unless they are built out already. (ABS has a scent)
- Partially built out frames are good on either side of the dark comb.
- A light char on new frames will make them more acceptable.

My Basic Formula

Change as you see fit

- Old well used 10 frame box – Deep- lots of propolis
 - Light weight styrene foam boxes have worked really well
- Feeder – well used, but empty (optional)
- Old black comb frame.
- Partially built out frame, or harvested frame. Yellow comb.
- Screw to hold them all in tight, pushed to side opposite entrance.
- Telescoping cover or big plywood top.
- Screen to close entrance for moving, or gates of different styles.
- Vented for moving the box

After the swarm

- Feed immediately, or in first several days if the flow isn't on.
 - 2 quarts of sugar water will go pretty quickly.
 - One in frame feeder is usually good to get them started
 - Be aware/careful of ants.
- Add a frame of capped brood
 - A swarm is all older bees. They need nurse/house bees as soon as possible.
- Let them get established for at least a week before moving them.
 - If they feel harassed, they will leave.
- Check to see that they have room to expand.
 - Some swarms come in 6-8 frames of bees.
 - Swarms build comb at a crazy fast rate.
- Set up a new swarm trap right next to it, or replace it soon.
 - At peak season, there may be two or more colonies scouting your trap.

Things I don't recommend

- Climbing tall ladders to set boxes, and retrieve them
- Putting traps in places that you cant easily carry a 40 lb box of bees
- Public spaces are a bit chancy. In someone's yard is best.
 - Neighbors call me when a swarm comes in. They watch from the window.
- Leaving the hive too long before moving them.
 - Swarm in July was busting at the seams in 4 weeks.
- Fiber Flower Pots or anything without frames.
- 5 frame nucs.
- New boxes.

SUMMARY

- It is your social responsibility – use your powers for good
- You likely already have all the right bits
- It's free bees – Either for you or for others
- Same as swarm chasing box
- Equinox to Solstice is prime time – sooner is better.
- All of your spare equipment should be set out in February.
- It's fishing. More traps in different places gives you more chances.

Scent

LGO or S. C.
Wax and Propolis
Old wood
Used Box

Old Brood
Comb

Entrance
Down wind

Accommodation

~40 liters box (10 frame)
Comb
Small opening
No breeze / no light
Lots of open space (25l+)
7 Frames w/o foundation

Part
Shade

Location

Height 4-15 ft.
Visible from 20 ft. up
Relative to a landmark
Near active hives
Morning sun
Afternoon shade

Proplist - stuff to bring to the presentation

- Styrene box
 - Frame feeder
 - Dark comb frame and light comb frame
 - F frames
 - Entrance reducer w/tape
 - Swarm Commander
- Wood box- old w/frames
 - Frame Feeder
 - Disc entrance
 - Screwed on bottom board.
- Beetle Jail “Swarm Trooper” 40 l box
 - \$40
 - All the right stuff
- Swarm Commander and LGO
- Several gate styles.
- Level
- 5 frame Nuc.
- Honeybee Democracy. –Seeley
- Poster of cycle of Bees.
- Strap for wood box.