

# The Pedersen Story



Karen Pedersen & Gil Pedersen



I learned our story through lessons, not through chronological order so that's what you're getting here too.

# Location, Location, Location



Almost 3 degrees different in latitude from Cranbrook, BC.

Different climate. No chinooks.

Take into account that we are in a different zone.

We wouldn't take gardening advice from Florida or Yellowknife.

# Family

Peder



John, Gil & Ed

Karen, Yens



3 generations in Canada

ownership/management has changed a lot

Flexibility/Adapt

We'll refer to what role Yens is making on the farm later.

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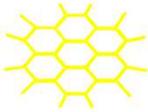
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# Lessons Learned

1. Try someone else's bees
2. Start small
3. Inspection is your friend
4. Grow gradually
5. Allow for growth
6. Solve problems
7. Don't be insane
8. Learn to read bees
9. Experiment
10. Read the writing on the wall
11. Learn from mistakes
12. Network
13. Learn to Analyze
14. Learn from other agriculture
15. Keep Learning
16. Working without gloves teaches you to pay attention to the bees
17. Breeding is a long game
18. Reputation matters
19. Pressure makes diamonds



Didn't learn our history chronologically.

Instead learned it through lessons so that's what's coming.

# Try Someone Else's Bees



We all tried it with family members before we committed money.

**Grandpa** worked with his grandfather. (1914-1916)

**John** worked as a bee inspector (starting 1959) and for a shipper (1961).

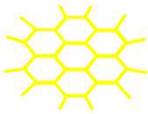
**Karen** worked in New Zealand. (1999-2000)

See if you like bees or not. Do you really want to invest money? Part of your **research** beforehand. Don't expect to be paid. Some people have actually paid us to do it.

Start when the hives aren't as strong and work up with the population. Get over your **fear** or at least learn to regulate your emotions.

If beekeeper after a while doesn't want you in their bees recognize that no matter how much you want to do it, you may not have a **aptitude** for it and they don't want to be the person risking their bees to teach you.

# Start Small



2 hives – 4 hives

2-4 hives. Not all your eggs are in one basket so you can **rob brood** when you roll a queen or let a hive swarm.

**Quad pack** easiest to wrap.

Figure out how much **honey** they'll yield and what to do with it.

Figure out the **timeline** and whether you can meet the schedule.

Figure out how to keep them **alive** rather than throwing a lot of money down the drain.

# Inspection is your friend

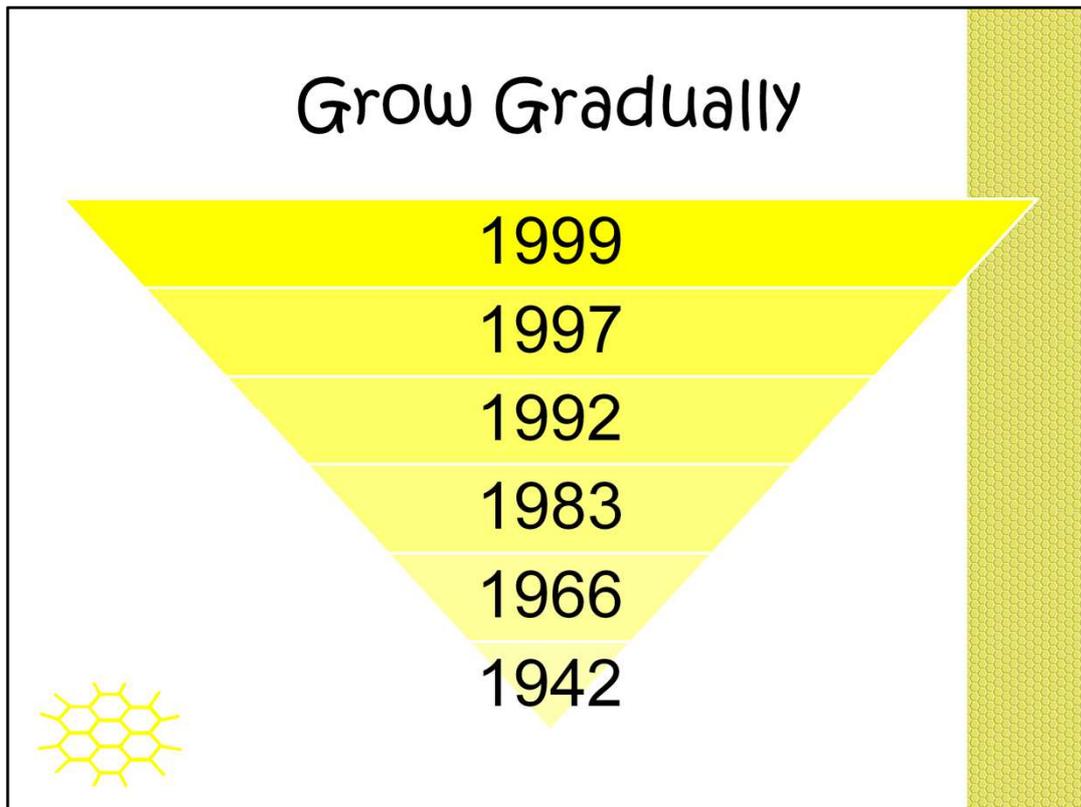


Don't accidentally take a **queen**.

Especially when you **don't know** what you're doing.

**AFB outbreak** (late 1970's – early 1980's) took sample for confirmation. (Get help!)

Don't buy **used equipment** or if you do, make sure it has an inspection certificate.



1942 – Peder got his first 2 packages of bees on his own.

1966 – Went from hobbyists to small commercial operators and started hauling bees from California. (from around 20 to 200) We started shipping honey to Sasko (Saskatchewan Honey Co-op).

1983 – Ed bought out our father's share .

1992 or 1993 – We started breeding queens.

1997 – We incorporated into Pedersen Apiaries Ltd. One of the reasons was to facilitate bringing Karen into the operation as a minority shareholder.

1999 Expanded honeyhouse again.

2004 John retired.

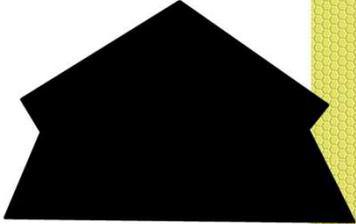
2014 Ed retired.

# Allow for Growth



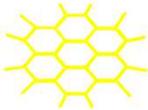
First honeyhouse to current honeyhouse.

# Allow for Growth



Build your building with straight walls.

# Allow for Growth



Fire was a curse yet a blessing.

Infloor heating so can add on and change rooms.

# Allow for Growth



Added on again in 1998.

# Allow for Growth



Added on solar panels in 2010?

# Solve Problems



**Identify the problem** – Package bees. (There was no golden era of packages.)

1. Captive market, therefore price increase.
2. Dependant on someone else for quality of the stock. (Not bred to produce honey)
3. Spread diseases.
4. Transportation dependence.

Early 70's honey prices spiked and then went back down. Price of packages went from around \$5.00 to \$25.00 in two years, but didn't go back down. One beekeeper from Nipawin area got into a verbal fight with one of the California shippers. It ended up with the Nipawin beekeeper being blacklisted by the California Bee Breeders so he had to get packages from his neighbor who ordered extra. It caused a group of beekeepers from the Nipawin area to start experimenting with overwintering hives in order to break the strangle hold the CBB had on Sask beekeepers.

Also around that time we started to hear stories of the spread of tracheal mites, then varroa mites. The drive to perfect the overwintering techniques gives extra impetus. To their credit the group of Nipawin beekeepers were willing to share their experience with anyone who wanted it. We also had a provincial apiarist who was preaching the merits of self-sustainability. During the late 70's and early 80's many in Saskatchewan embraced overwintering.

1948 – Only year bees haven't been kept on the farm. Spring flood interrupted the transportation system so that no packages were available.

# Insanity

= Doing the same thing and expecting a different result



Alternatively don't fix what isn't broke.

## **Grandpa wintering.**

1942 Peder got his first 2 packages of bees on his own. One hive swarmed in the summer which he caught and started a 3<sup>rd</sup> hive. That fall he built a box into which the 3 hives would fit, single brood chambers. He packed straw around the hives for insulation. All 3 hives came through the winter in good shape. The next summer in reading the "Western Canadian Beekeeper" he found out in order to successfully winter hives you needed a double brood chamber hive. He faithfully followed this advice and never again had any luck wintering hives. Sometime in the last half of the forties he quit trying to winter hives.

## **Other examples**

**Splitting hives** to make up numbers. Then they die over winter again because they're too weak. Cycle repeats.

Bringing in **warm weather stock** and expecting them to live through winter.

**Free movement of bees** results in spread of diseases.

# Learn to read bees



Bees don't read the same books and articles that you and I do.

Know your **flowers and the bees preference** – dandelion flow is overrated. Some talk about the buffalo beans, but they don't work them. Work different flowers in different areas.

May 19, 2018 Bees had to fly over dandelions to get to the others. Could only find 1 bee on dandelions. Could only find 1 bee on Saskatoon bush. Multiple choices in the caraganas and pincherries. From reading the bees, what should I have learned?

How many have caught swarms? How many have taken them out of a building? How many have taken them out of a hollow tree?

Bees are not native to Canada. Often read that they prefer to go into a hollow tree and that the **ideal hive size** is like a hollow tree, yet I've seen lots of bees swarm into buildings, cars, etc, but never seen one go into a tree. They don't care what shape the hive is. Old equipment coming back is another example of don't fix what isn't broke.

**Expanding brood nest** with empty comb can retract the brood nest. If you're going to do it, use a comb of honey.

**Doubles need wax** between combs to go up. Don't like space in between.

# Experiment



**Don't be afraid to experiment, but don't risk all of your hives if possible, share what you learn.**

1. **Overwintering** – we'll cover how that happened in overwintering.
2. Alternative methods of **Varroa** Control.
3. **Nucs.**
4. **Top entrances.**
5. **Pollen contamination** impacting queen cells.
6. **Baby nucs** (Yens – the hobby beekeeper has been able to overwinter a miniature hive for several years)

# Read the Writing on the Wall



In other words, listen for the train and get off the track before it slams into you.

**Antibiotics** are the obvious one right now, but the **border closure** was one too.

1983 - About this time, tracheal mites were found in N.A. The border was not closed between USA and Canada at that time. Decided instead to use testing and only import from clean shippers. Got tracheal mites quickly anyways.

1986 – Late in the fall, Varroa mites were found in the USA.

1987 – Jan 1<sup>st</sup>, the border was closed to the importation of bees from the US. Pedersen Brothers' plan was to import around 100 packages in 1987 to top off our overwintered hives. That didn't happen so we were down in hive numbers for a couple of years. We had been wintering for several years by that time. We were mainly using indoor wintering, but with not enough indoor space, some were being wintered outside. We would bring the weaker colonies inside and leave the strongest outside. With California stock we started around a 33% winter loss.

We would suggest that that the writing is already on the wall for miticides/pesticides.

# Learn from Mistakes



Don't get the **free equipment** from someone's barn.

Shipping from "clean shippers" didn't stop spread of Tracheal mites so **SK closed border** and restricted the movement of bees to prevent spread of Varroa.

That gained us 20 years to learn about others mistakes on **Varroa treatment**. Didn't get Varroa until 2008. Therefore, using IPM rather than quickly trying to breed miticide resistant mites.

**Dr. Samuel Ramsey** recently discovered that the initial research on Varroa wasn't accurate about them feeding on the bee's blood or hemolymph. So now he is raising money to go study Tropilaelaps mites in Thailand so we don't repeat the same mistakes.

**Pre-Langstroth equipment.**

# Network



Not only can you learn if you like bees from someone else, but you can always learn from others. **How do you learn not to repeat their mistakes unless you are talking to them?**

Take advantage of **field days to tour operations**. Ask questions. Learn from others successes and failures.

It was how we got the **Russian stock**.

# Learn to Analyze



**Just recognize that you have to learn to judge the info.**

**There are lots of ideas and info in beekeeping world. Learn to filter it through analysis. What climate is it from? Is it based on outdated info? Does it make sense? When you hold it up to the light of the real world, does it stand up? Is it just an old beekeeper tale?**

**Example:** Peder should have filtered the information that you can't **winter singles** in Western Canada with the reality of his experience.

Old beekeeper who maintained that you would kill the queen if you shot a **shotgun** into a swarm. New beekeeper realized that you couldn't even guarantee that you could hit the tree they were on. Maybe the rest of the things old beekeeper said were questionable too?

**Small cell** to control Varroa destructor.

Tree is not the **perfect hive** in Saskatchewan.

The **Flow Hive**.

# Learn from other agriculture



Dairy agriculture has been weighing and breeding from milk production for multiple decades. We've been doing it for 15 years. What drives me crazy is that I still can't get a beekeeping record program that allows for automatic transfer of **production weights** into it.

Numbers on hives is no different than **ear tags**.

**Breeding** to get better stock. We think someone else has to do it or it has to be down through DNA analysis. Really?

# Keep Learning



We've changed **stripping methods** 4 times.

1. fume boards
2. blowing
3. tip off
4. bee escapes

Just added **exclusion bags** to prevent robbing last year. Testing robbing guards.

# More Lessons

- Working without gloves teaches you to pay attention to the bees reaction to you
- Breeding is a long game
- Reputation Matters
- Pressure makes Diamonds



The last 3 we'll cover in further talks.

# Questions?

