### Beekeeping on the Prairies

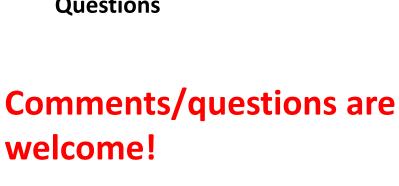
#### Farm over view

A walk through the farm

Specific Management practices I use to CAPITALIZE on Honey bee Behaviour

- -early spring hive development
- -management of hive growth
- -extraction facility
- -winter nest preparation

Questions





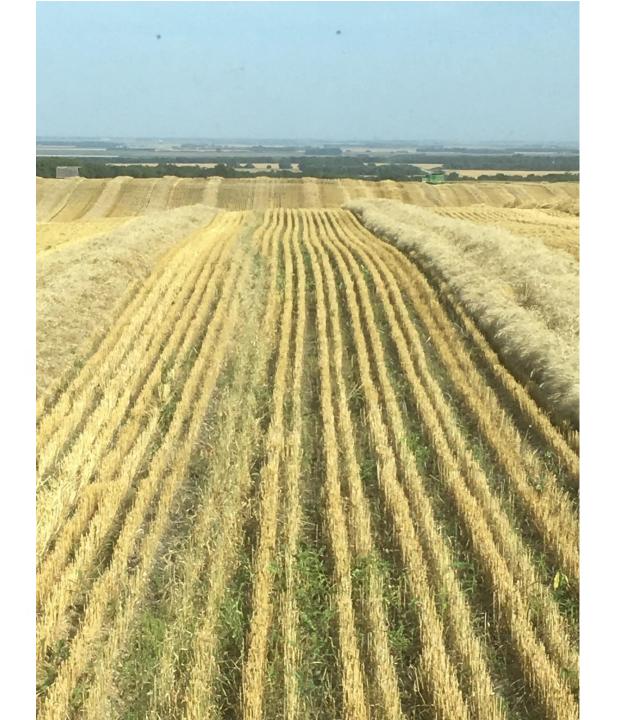
#### Ian Steppler

- -Farm located near Miami MB
- -Married to Sandy, family of 5
- -Diploma of Agriculture
  - -Introduction to beekeeping
- -Director on the MBA
- -Owner/Manager/President Steppler Farms Ltd.
- -The farm's Apiarist



#### Miami Manitoba





#### **Grain Farm**

- -3300 acres
- -wheat, canola, corn, soybean
- -silage and feed grains
- -Conservation practices



#### Cattle Farm

- -500 PB Charolais cattle
- -43 Years breeding Charolais
- -Consistes of Two Annual Sales
  Bull Sale mid March
  Piece of the Program Mid
  December



#### Honey Farm

- -1200 hives
- -Primarily honey producers
- -300-350 drums annual production
- -hire up to 7 local employees
- -Member of BeeMaid Honey





#### A step by step Walk Through My Honey Farm

A management perspective from a Prairie Beekeeper



It all starts inside



#### Spring Approaches

-indoor temps start to increase -bees get active





#### Move out at night

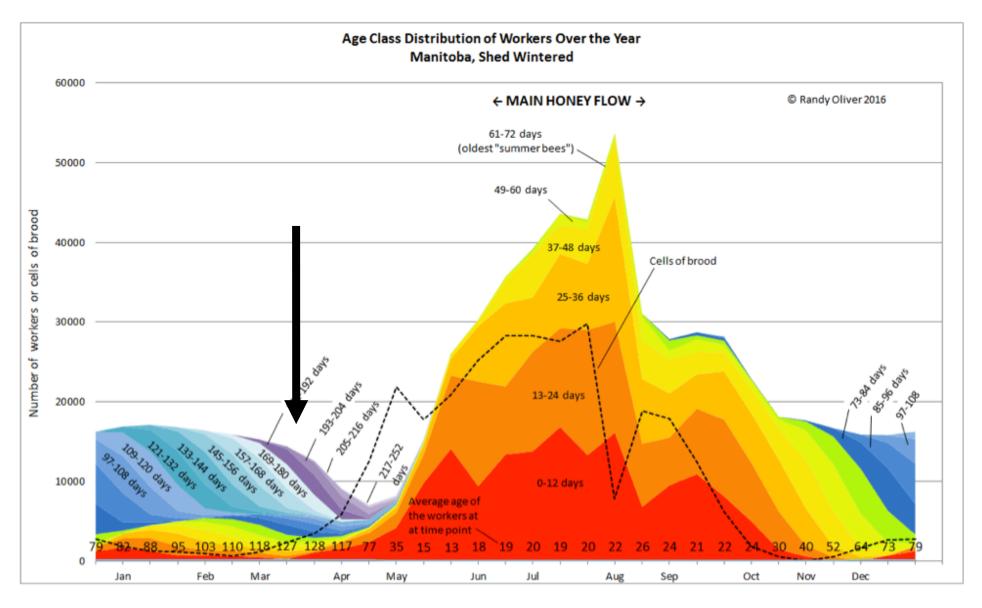
- -bees don't fly at night
- -settles them into their yards
- -drive to yards on frost



#### First Flight

- -5 months without a cleansing flight
- -free flight to relieve themselves
- -quick with feedassessment/emergency feeding





- -exiting winter with 180-200 day old bees
- -focus on disease control
- -focus on stimulating colony growth

# Supplemental feeding

- -dry feed
- -open liquid feed
- -protein patties



Protein Supplement





#### Apiary Assessment

- -tip hives back and counting frames from underneath (frame score)
- -Strong 8-10, Medium 4-6, Weak <3
- -culling out dead and weak
- -monitor for disease
- -treat diseases accordingly



#### Clean up Equipment and Disease Check

- -disease check
- -scrape frames and boxes
- -sort empty/pollen/honey





# Sort boxes to make seconds

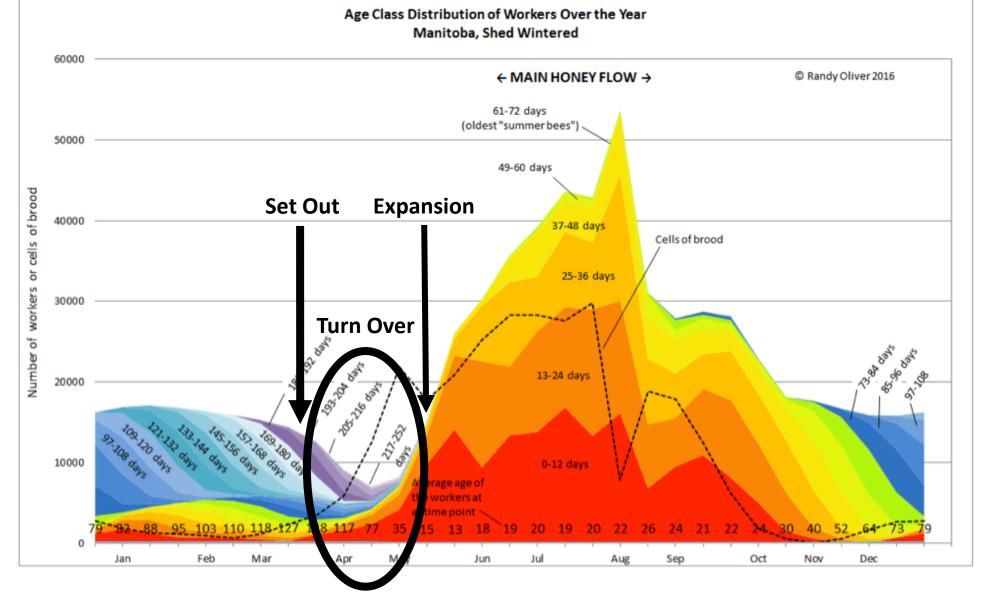
2 foundation

1 honey

4 empty

1 honey

2 foundation



- -switch out winter bees/spring bees
- -add space to accommodate massive population growth

### Secondary Hive Assessments

- -first round of brood has hatched
- -tip to assess hives
- -Strong hives (8-10 frames) get second brood box added
- -Medium hives (4-6 frames) left in singles
- -Weak hives (<3 frames) left in singles and taken to Nursery yard



#### Keep them tight/Give them space

# the Philosophy of managing cool variable spring conditions

- -bees thrive in small spaces
- -keep them tight but
- -hives grow exponentially
- -give them space



# Singles grow into double brood

- -Upward movement of the queen
- -I want a centered nest
- -Lay 4 frames in the empties frames
- -foundation buys time



### Split

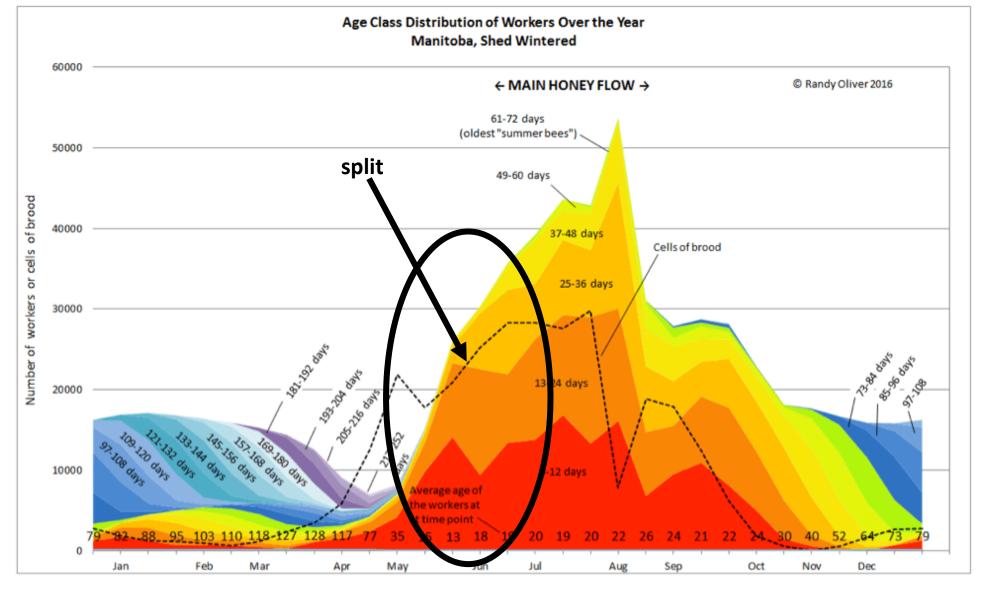
-busiest time of the year

-split to early and the hive is shocked and moves backwards

-split too late and the hive swarms

We want to promote continual hive growth ALL through the spring





- -May and June >>Swarm Control<<
- -gave them space May 1(double brood)
- -manage population May 20(take splits)

# Sorting out the splits

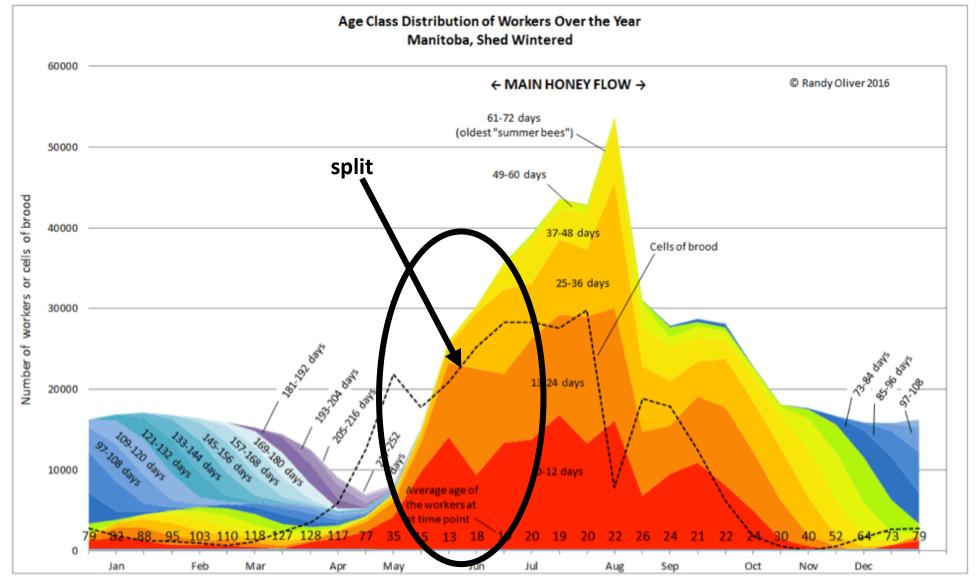


# Take the single splits

-strip top boxes-remove excluders

ADD SUPERS AS THE SECONDS,





- -splits taken
- -promote continued hive growth >>more bees more honey<<
- -continue to allow the queens to manage its nest in 2 boxes
- -clovers/alfalfas building bees

or Sort and take away as nucs





Import queens

### Queen Cells

Self Sustainable Queen Management

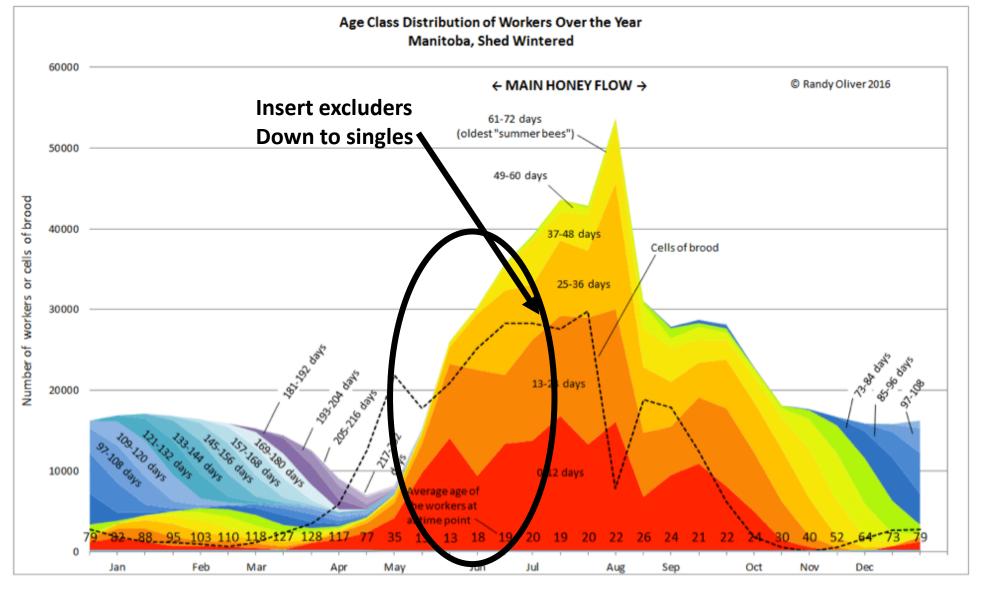


- -the queen has full reign over both boxes
- -the apiary is set into its summer yards and ready for the main flow
- clovers and early alfalfas provide steady nourishment
- -down time...queens are happy, no hives are swarming, everything is great!



### Canola





- -on the back side of the swarmy season (solstice)
- -brood laying has maxed out and holding steady
- -heavy nectar flow redirects bees attention
- -space will be placed overhead



Back down to singles

## Inserting Excluders

-school kids start work

-crew of 3-6

-simply shake the queen and bees down

-insert excluder





Fumes are used to quicken the work up Canola flows, boxes plug, space is needed!!

-we push hard long hours to get these hives shook down and supered up Back down to a single brood nest

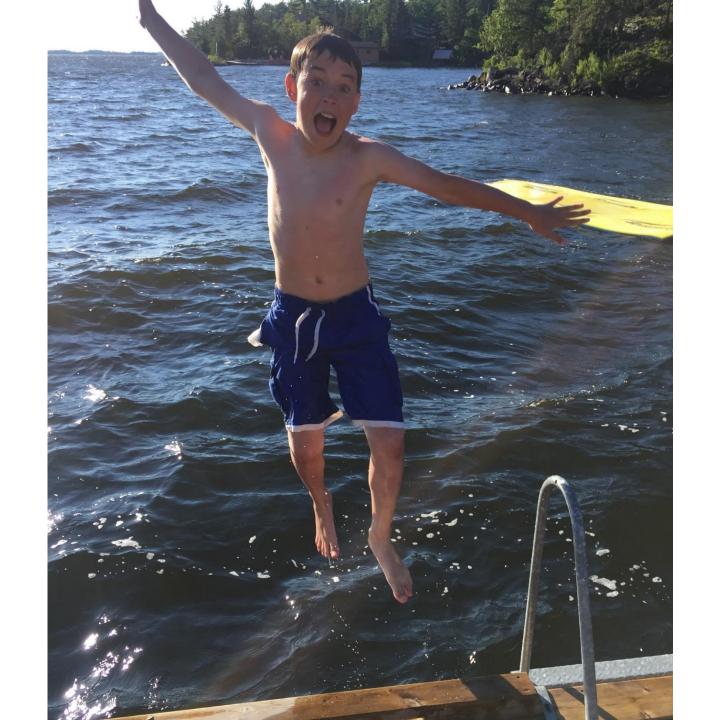
Seconds hatch out and allowed to backfill

Thirds are added



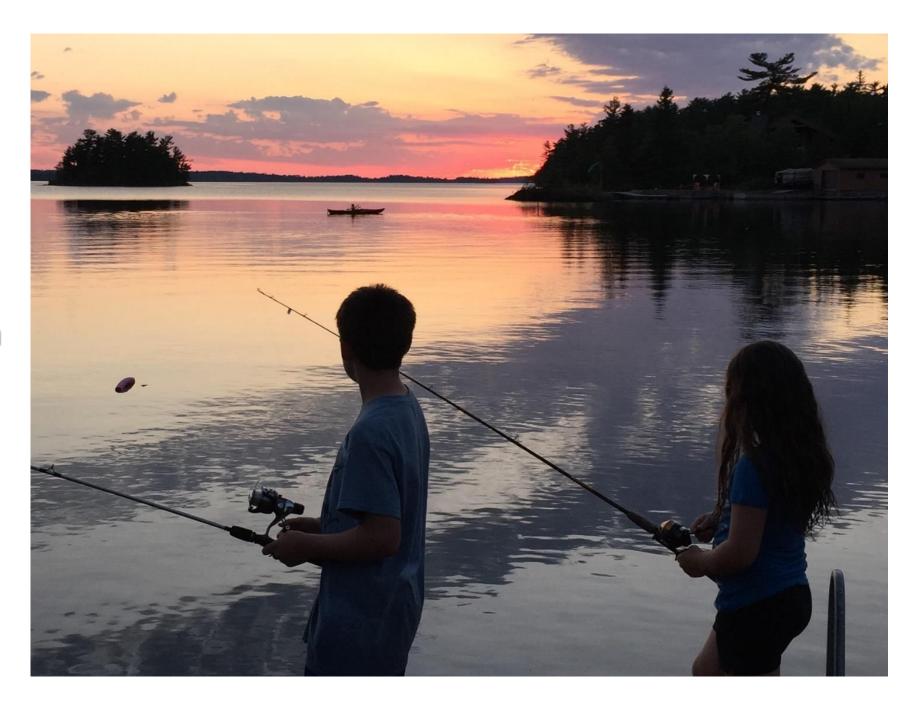
Apiary is set for the main flow

### Family time



-crew adds fourth-crew mows bee yards-crew builds frames-crew sorts foundation

we wait for the honey boxes to fill



#### Pre harvest Supering Round

-21 days after inserting excluders the brood hatches -the seconds are backfilled

Harvest Begins
-stage supering according to the
honey pull schedule
-one box per week rule

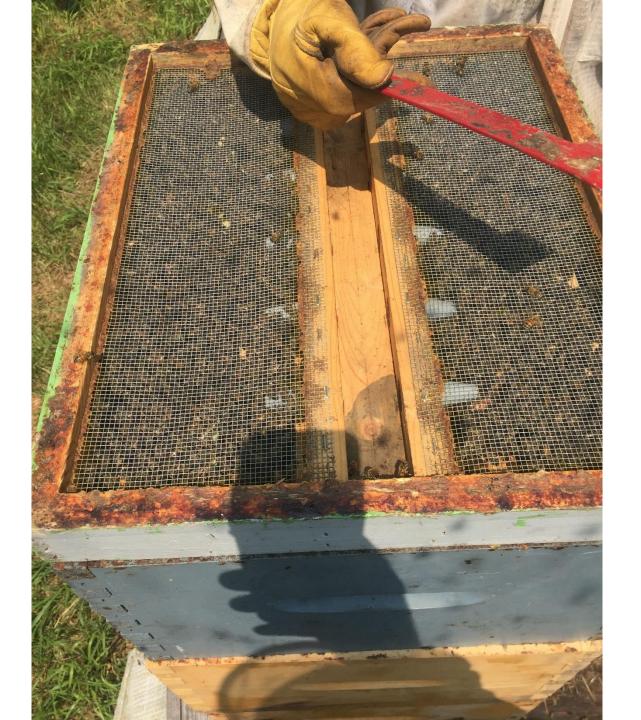


### Honey Pull

Escape boards

-full boxes are lifted -empties are set under escapes





- -escapes are left for 3 days
- -the bees migrate down through the cones
- -the bees cant get back up
- -we remove bee free boxes
- the bees do not know any different

Collect the Honey





Hot room, 30 degrees C floor heat



60 frame Cowen Extractor Cooks & Beals wax separator

-3-4 crew

-extracts 275-350 boxes per day

-18-22 drums per day



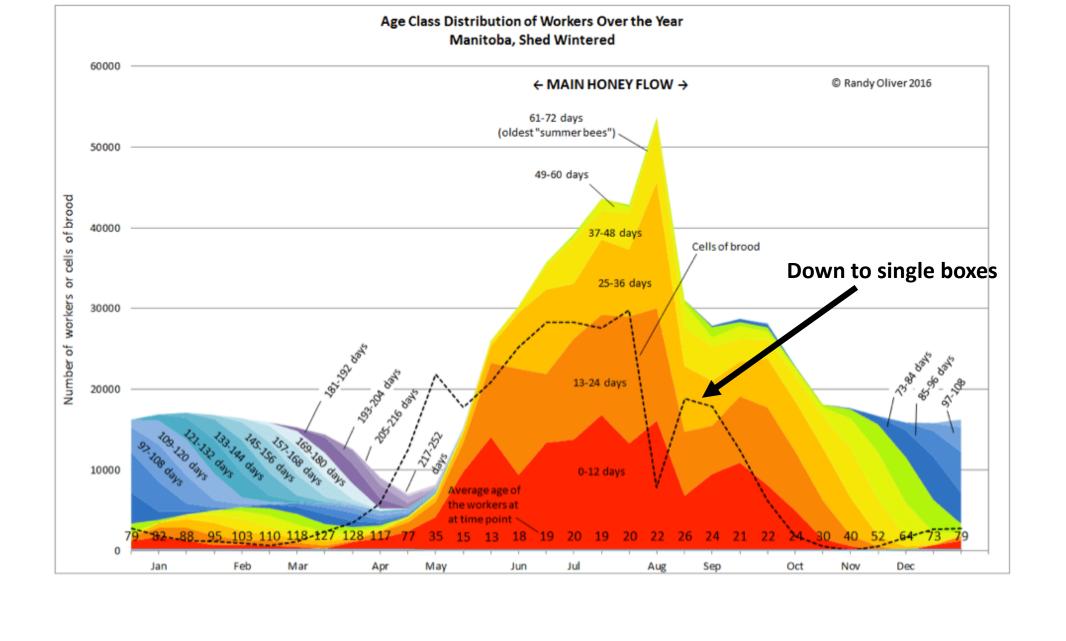
### 2-3 honey collection rounds

- -2 crews
- -yard crew of 2-3
- -extraction crew of 3-4
- -Start pulling honey mid July, typically ends September
- -total honey production of 200-250,000 lbs 300-375 drums





- -Last round the bees are pushed down into singles
- -the bees need feed ASAP
- -8-9 frames of brood and pollen leave very little space for honey stores



# Immediate open feeding

-very careful not to over feed

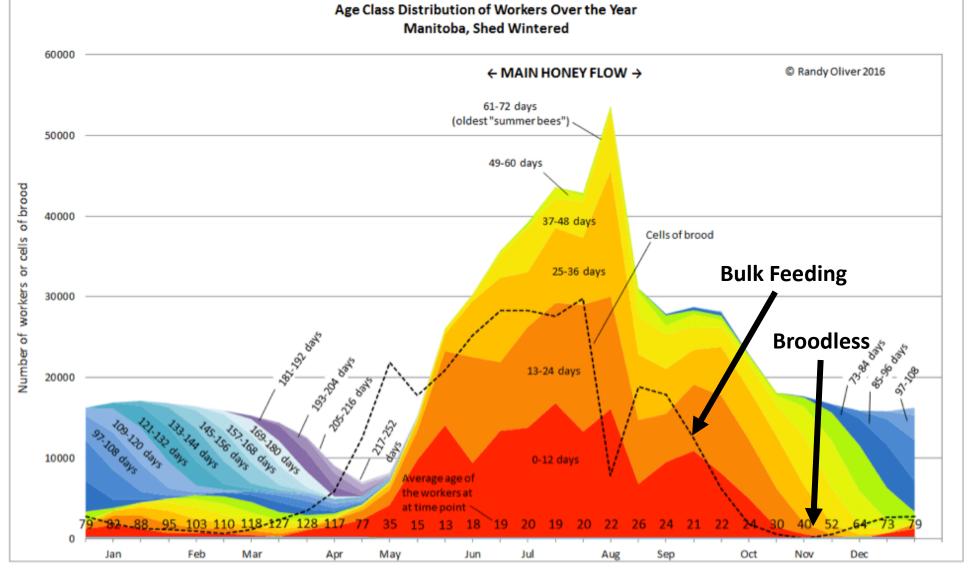
-very careful not to under feed



### September Bulk Feeding

- -fall assessment round to cull poor failing hives
- -disease monitoring
- -mite treatments
- -heavy feeding to backfill nest





- -the queen finishes off brood laying
- -we back fill the brood nest with syrup
- -Old and plentiful summer bees make quick work storing away syrup
- -by October the perfect sized winter nest easily fits into a single brood box

Credit Randy Oliver

Target weight of 95 lbs per single

Random hives are weighed



# Fall OAV treatment

Mid October/November hives are broodless

Before we bring the hives indoors we treat with OAV

>>recommended<< IT WORKS!





Hives are picked from the yards



Stacked in my Wintering Shed





Questions?