

**2019 Healthy Hives
Mite Testing
Mid-Project Update**

January 2020

2019 NH Healthy Hive – Mite Testing

Goal:

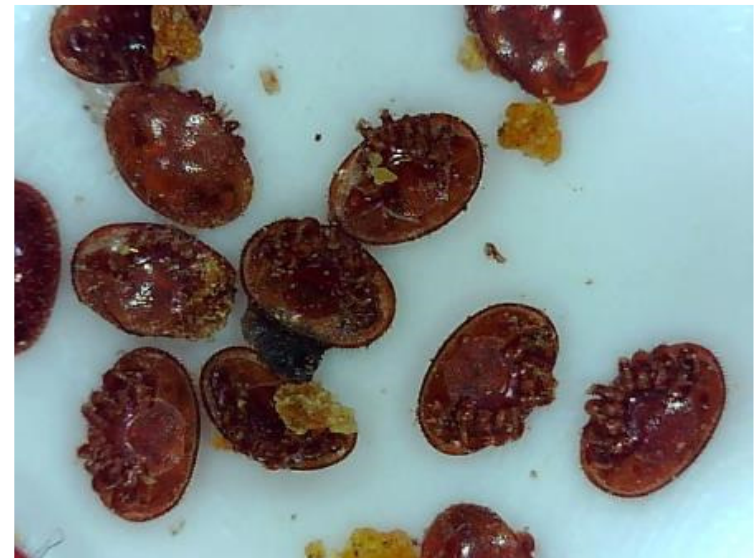
The goal is to get more beekeepers (whether they treat or not) to do testing and make them more aware of their varroa situation.

What does it entail?

Do a monthly mite check by either alcohol wash or sugar roll & contributing data via on-line, email or USPS mail

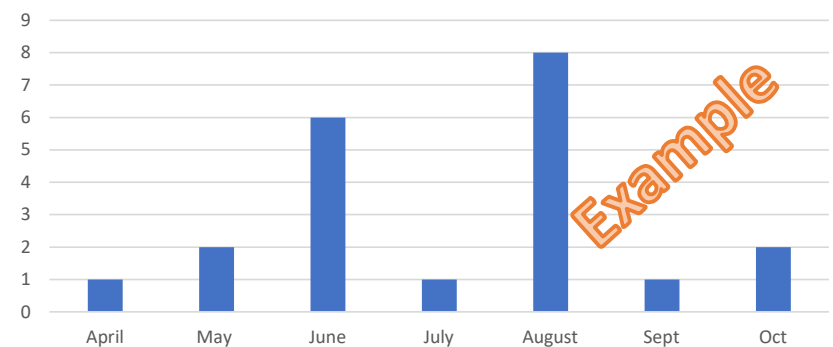
Details & FAQ at:

<https://www.nh-honeybee-health.com/mite-testing>



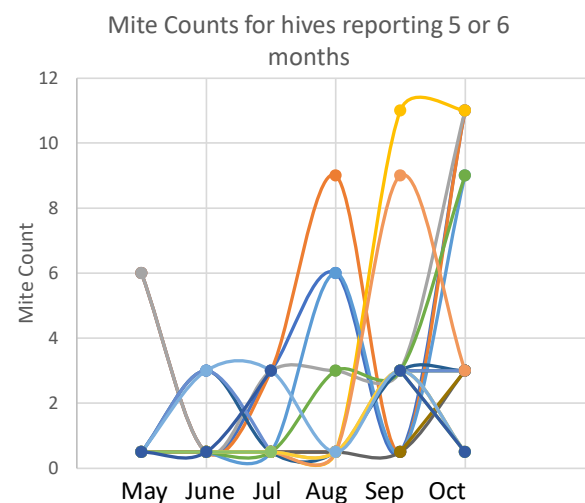
	Is the Hive Alive?	Mite Count/100 Bees	Mite Count method (Sugar Roll/Alcohol Wash)	Nosema Spore Count	Commercial Varroa Treatment		Commercial Nosema Treatment		Other Treatments		Did Hive Swarm? (YES/NO)	Requested? (YES/NO)
					Treated? (YES/NO)	Method	Treated? (YES/NO)	Method	Treated? (YES/NO)	Method		
April												
May												
June												
July												

Mite Count/100 Bees



Mite Testing Project – 7-month Summary

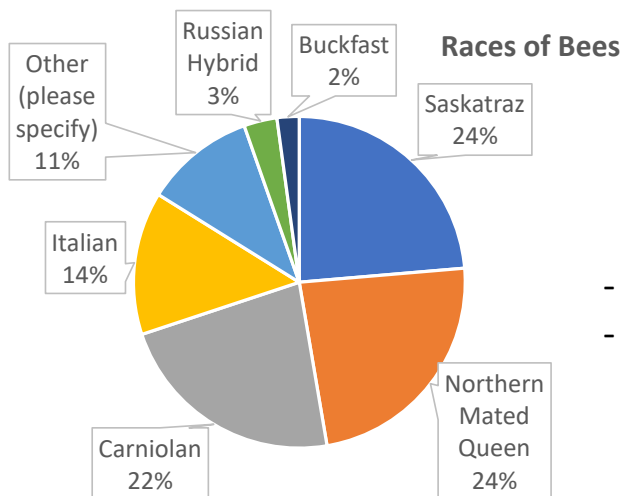
- Primary Take-away:
 - **You cannot rely on data from other beekeepers.**
 - **Doing your own testing in your own hives is critical.**
 - **Even if it is after treatment, and especially in Sept-October.**
- *44 beekeepers/93 colonies reported data at least one time*
- *Overwintered colonies showed highest mite counts early in the season.*
 - All colonies and races exhibited high counts as the summer progressed.
- *Many colonies exhibited **BIG jumps in mite counts from month to month.***
 - In graph at right note the large jumps in some months
- **Treatments did not always result in lower mite counts.**
- **The monthly mite count does not appear to be predictable for a given colony no matter whether it was treated, requeened, swarmed or had a brood break.**



This report summarizes the data collected from April->Oct 2019.

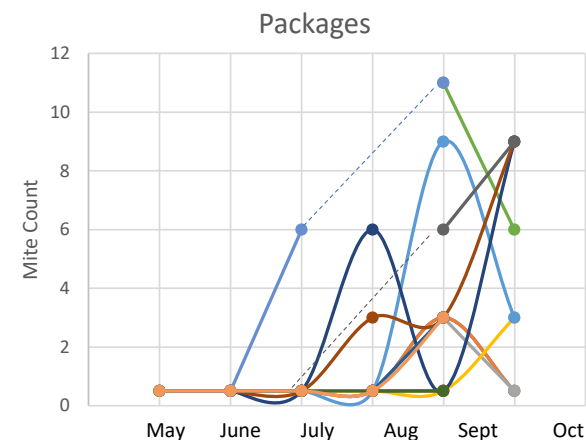
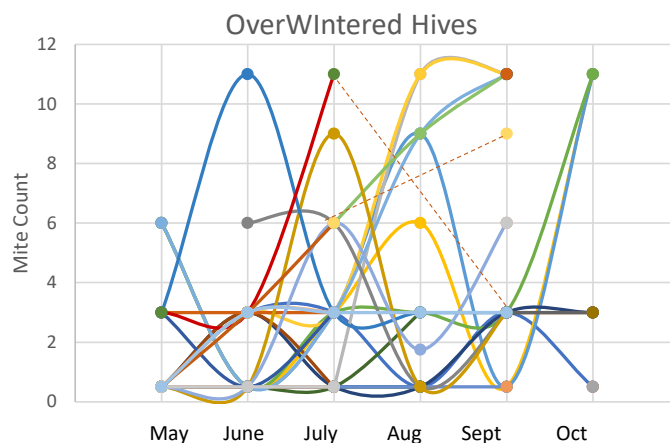
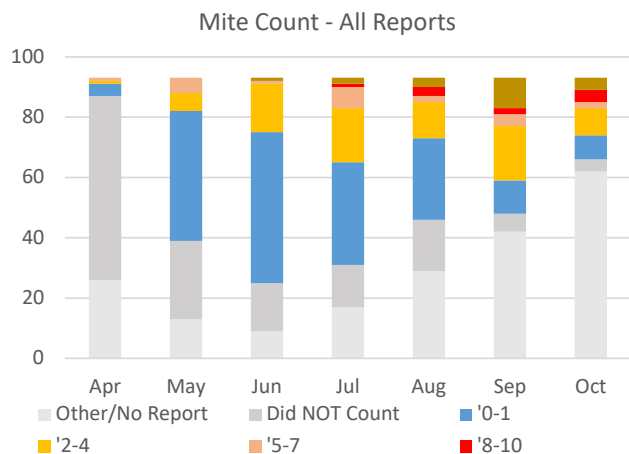
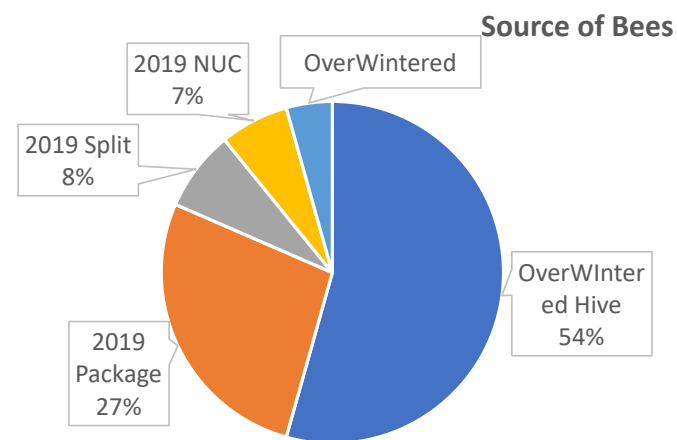
It shows some interesting trends. We will have to collect multiple years of data to know if these trends hold over the long term

2019 Mite Testing (Mid Project Report)

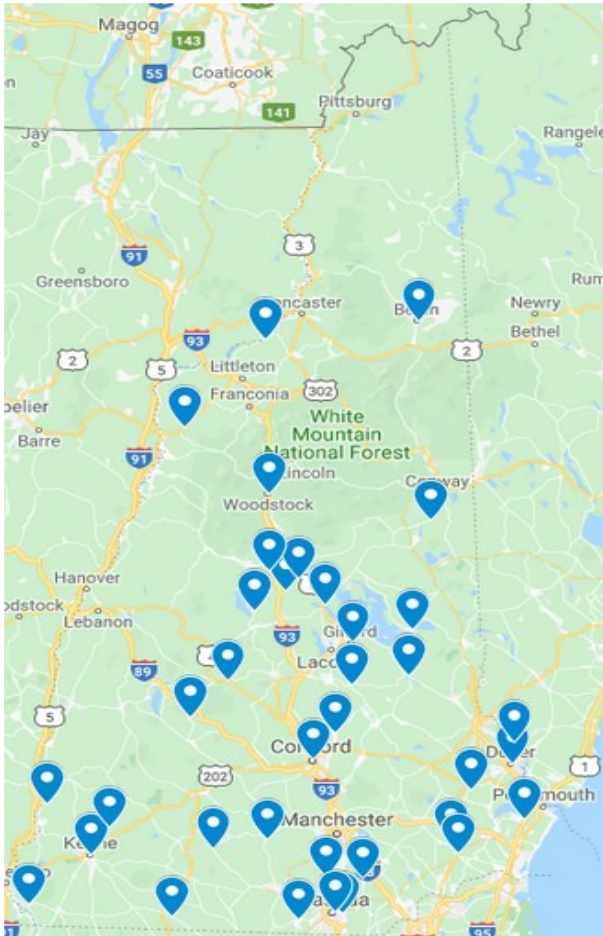


Primary Take-aways:

- You cannot rely on other's data
- Doing your own testing in your own hives is critical.
 - Even if it is after treatment, and especially in Sept-October.



Colony Locations and Reporting

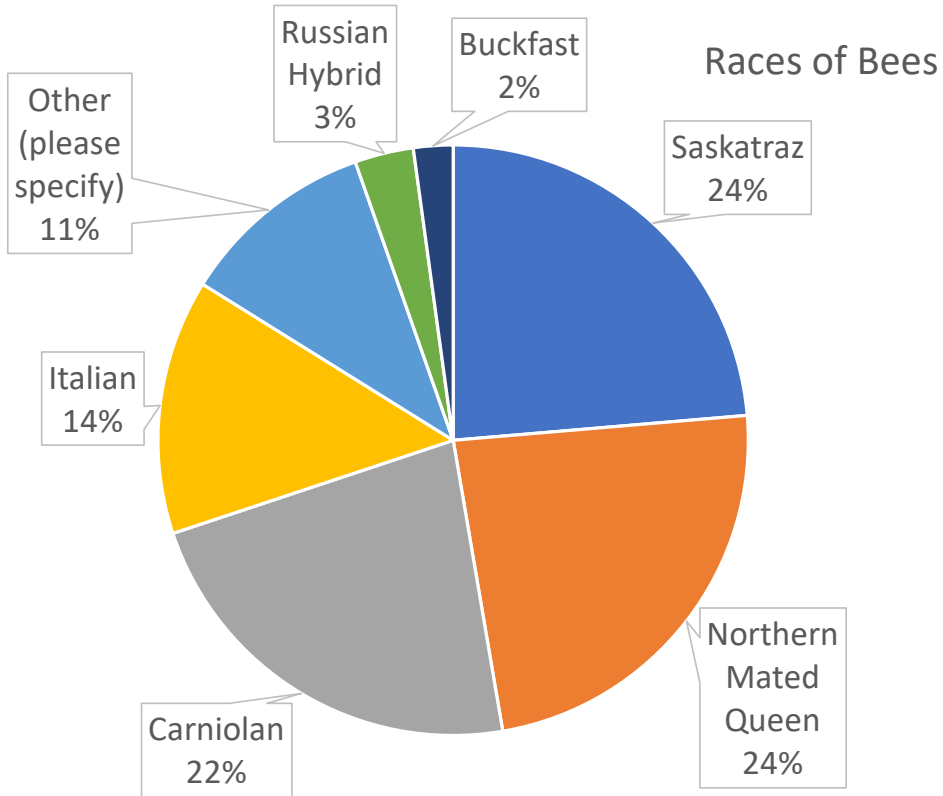


- 44 Beekeepers Reported Data at least 1 time
- 93 Colonies in 36 different towns (9 of the 10 counties)
 - 4 colonies were dead by Sept
 - 1 had high mite count, 1 had high nosema count, 1 pesticide exposure, 1 unknown

	# Colonies reporting mite counts for 1,2 or 3 months	# colonies reporting mite counts for 4,5,6 or 7 months	Total Colonies
Belknap	2	8	10
Carroll	0	3	3
Cheshire	3	15	18
Coos	1	3	4
Grafton	0	20	20
Hillsborough	5	11	16
Merrimack	1	9	10
Rockingham	5	2	7
Strafford	2	3	5
Total	19	74	93

# of months reporting mite counts	# of Colonies
7	18
6	22
5	26
4	8
3	8
2	5
1	6
Total	93

Race of Bees Participating

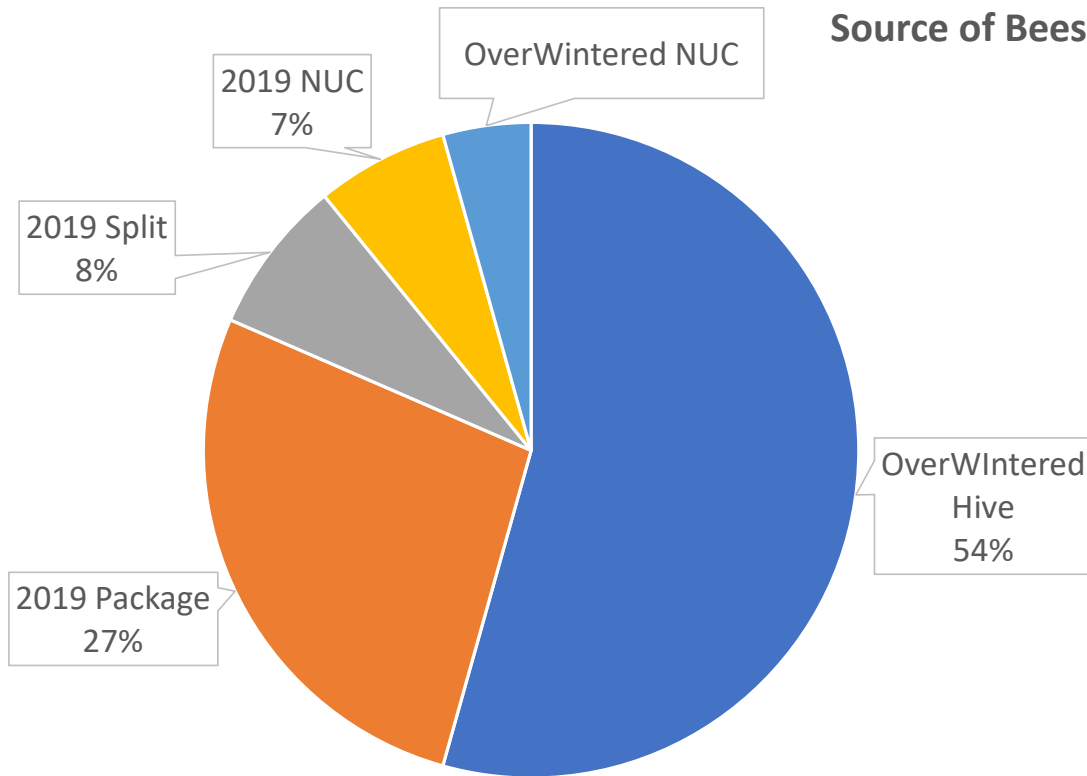


Bee Race	# Colonies
Saskatraz	22
Northern Mated Queen	22
Carniolan	21
Italian	13
Other (please specify)	10
Russian Hybrid	3
Buckfast	2
Total	93

Good mix of Bee Races.

Sources of Bees Participating

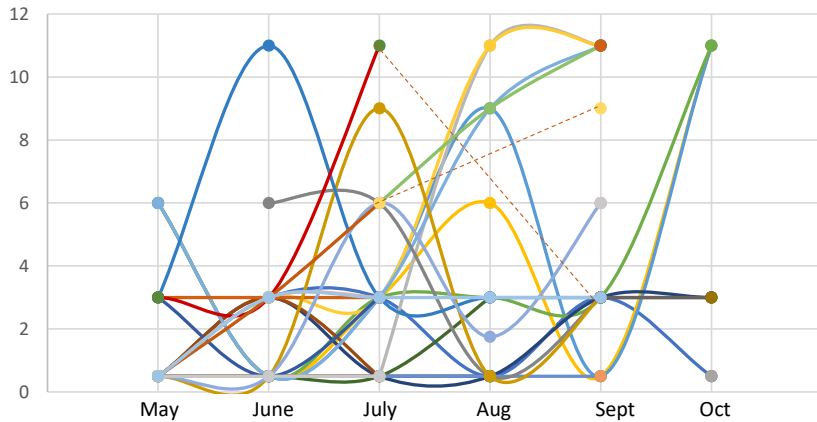
Source of Bees



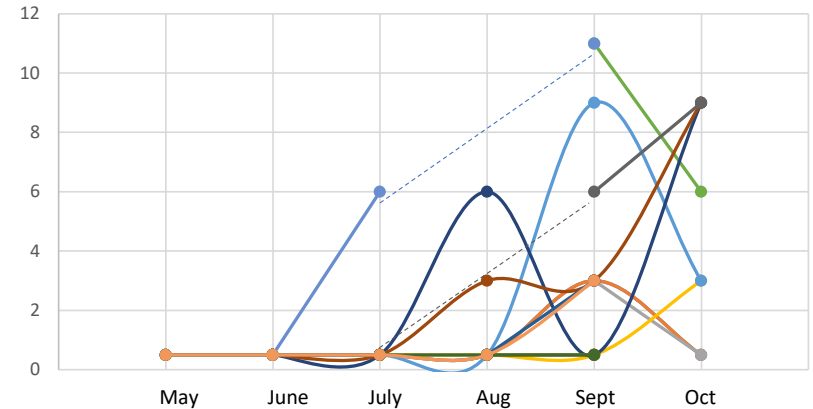
Source	# Colonies
Overwintered Hive	50
2019 Package	25
2019 Split	7
2019 NUC	6
Overwintered NUC	4
Other	1
Total	93

Mite Counts –Hives w/ Sept & Oct reports– By Source

OverWintered Hives

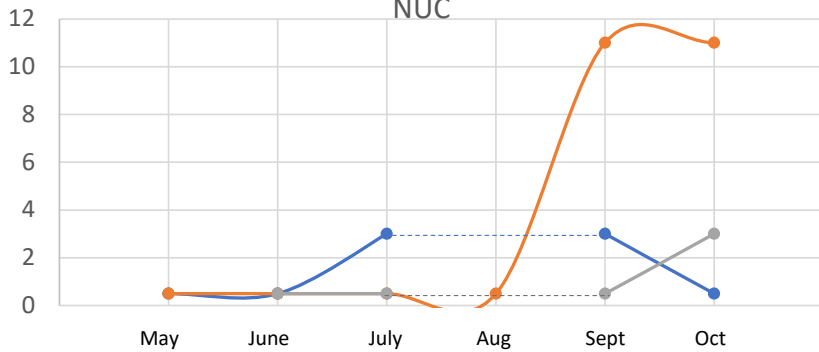


Packages

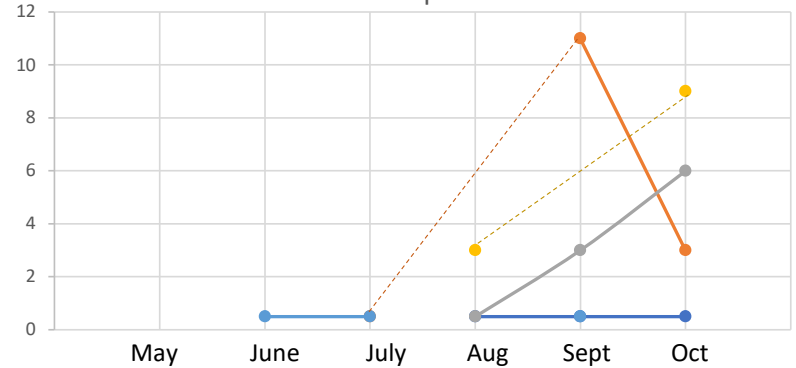


*dotted lines indicate no report in the month

NUC



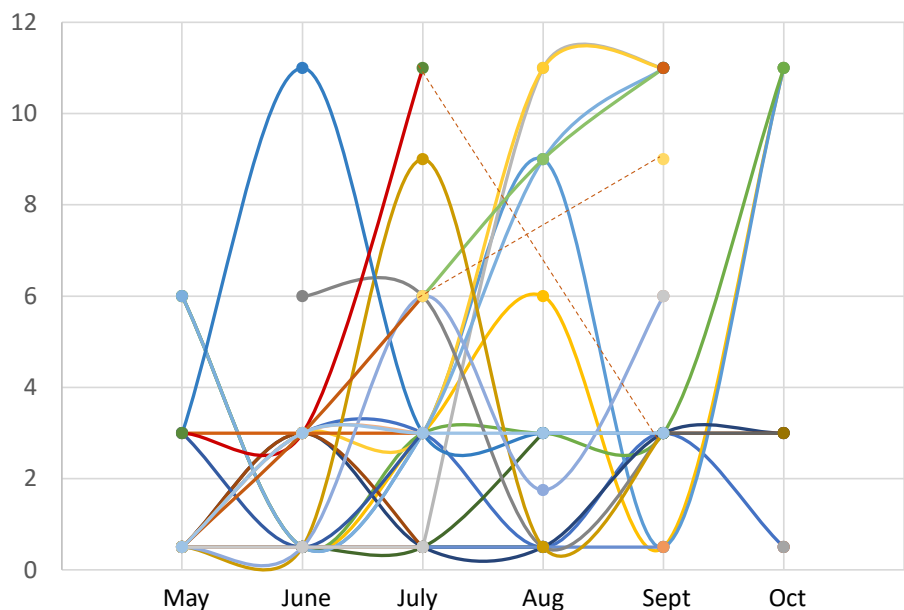
2019 Splits



Notice the trend lines as the Summer progresses and brood builds. Reductions in the mite counts are most likely Due to treatment. OverWintered Hives have much more variability compared to the

Mite Counts –Over Wintered Hives w/ Sept & Oct reports

OverWintered Hives



- 56 ● 2 ● 52 ● 45 ● 46 ● 49 ● 55 ● 9 ● 10 ● 71
- 17 ● 18 ● 28 ● 70 ● 64 ● 87 ● 65 ● 86 ● 36 ● 42
- 85 ● 88 ● 89 ● 39 ● 51 ● 44 ● 38 ● 43 ● 69

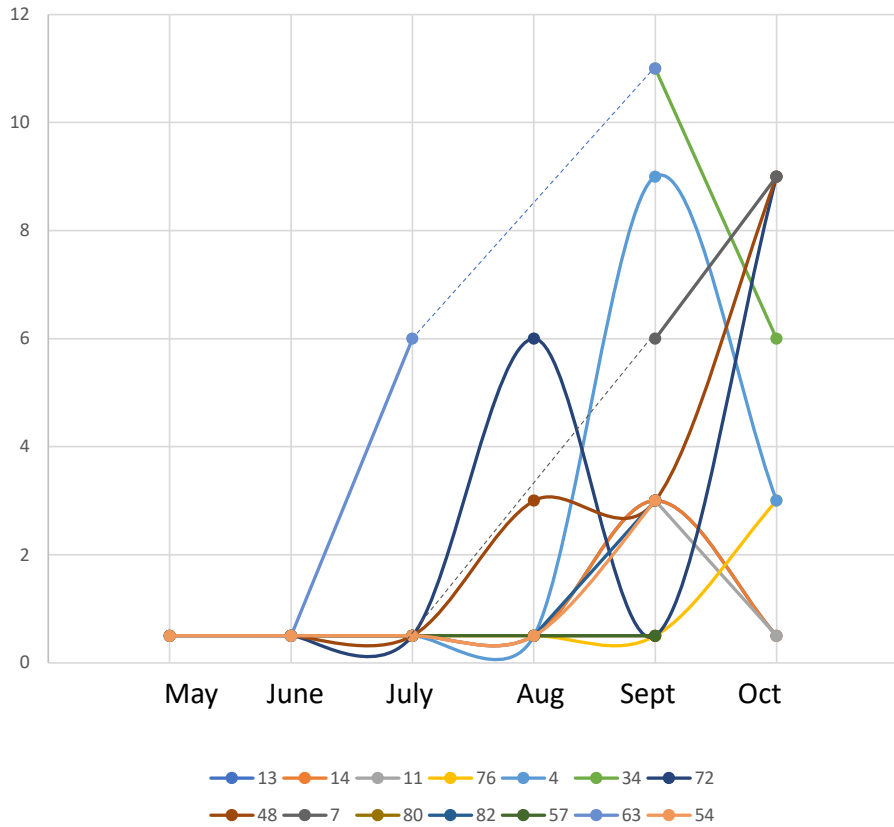
*dotted lines indicate no report in the month

Overwintered Hives started at higher mite counts and are much more variable than those in the packages

	May	June	July	Aug	Sept	Oct	Number Months Treatments
56	'0-1	'2-4	'2-4	'0-1	'2-4	'0-1	2
2						'0-1	1
52	'0-1	'0-1				'0-1	1
45	'5-7	'0-1	'2-4	'5-7	'0-1	11+	5
46	'5-7	'0-1	'2-4	'8-10	'0-1	11+	5
49	'5-7	'0-1	'2-4	'2-4	'2-4	11+	4
55	'0-1	'2-4	'0-1	'0-1	'2-4	'2-4	2
9	'0-1	'2-4	'0-1		'2-4	'2-4	1
10	'0-1	'0-1	'0-1		'2-4	'2-4	2
71	'0-1	'0-1	'0-1	'0-1		'2-4	2
17	'0-1	'0-1	'0-1	'0-1			1
18	'0-1	'0-1	'0-1	'2-4			2
28	'0-1	'0-1	'0-1	'0-1	'0-1		5
70	'0-1	'0-1	'0-1		'0-1		1
64	'0-1		'0-1	11+	11+		2
87	'0-1	'2-4	'2-4	11+	11+		1
65	'5-7	'0-1	'2-4	'8-10	11+		4
86	'0-1		'5-7	'8-10	11+		1
36	'2-4	'0-1	'2-4		11+		0
42	'2-4	'2-4	'2-4		11+		1
85		'5-7	'5-7	'0-1	'2-4		1
88	'0-1	'0-1	'8-10	'0-1	'2-4		1
89	'2-4	11+	'2-4	'2-4	'2-4		2
39	'2-4	'2-4	11+		'2-4		1
51	'0-1	'0-1	'5-7	0-1 '2-4	'5-7		4
44	'0-1	'2-4	'2-4		'5-7		0
38	'0-1	'0-1	'0-1		'5-7		1
43	'0-1	'2-4	'5-7		'8-10		0
69	'0-1	'2-4	'2-4	'2-4	'2-4		4

Mite Counts –Hives w/ Sept & Oct reports– Packages

Packages

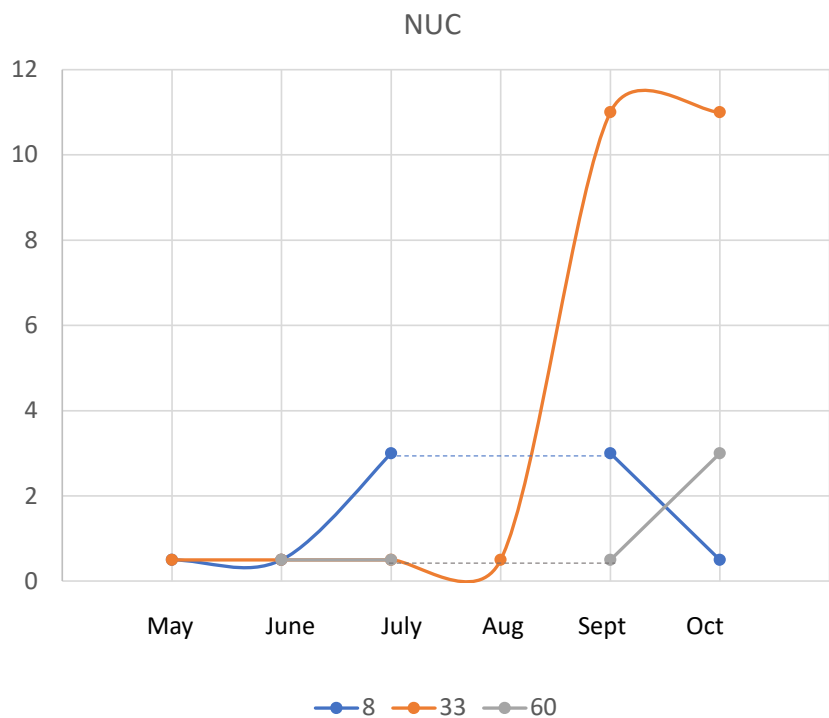


*dotted lines indicate no report in the month

Hive #	May	June	July	Aug	Sept	Oct	Number Months Treated
13		'0-1	'0-1	'0-1	'2-4	'0-1	1
14		'0-1	'0-1	'0-1	'2-4	'0-1	1
11	'0-1	'0-1	'0-1		'2-4	'0-1	2
76		'0-1	'0-1	'0-1	'0-1	'2-4	2
4	'0-1	'0-1	'0-1	'0-1	'8-10	'2-4	1
34					11+	'5-7	1
72		'0-1	'0-1	'5-7	'0-1	'8-10	2
48		'0-1	'0-1	'2-4	'2-4	'8-10	3
7	'0-1	'0-1	'0-1		'5-7	'8-10	1
80		'0-1		'0-1	'0-1		1
82				'0-1	'2-4		1
57	'0-1		'0-1	'0-1	'0-1		0
63		'0-1	'5-7		11+		1
54	'0-1	'0-1	'0-1	'0-1	'2-4		0

Package mite counts started building as brood increased.

Mite Counts –Hives w/ Sept & Oct reports– NUCs



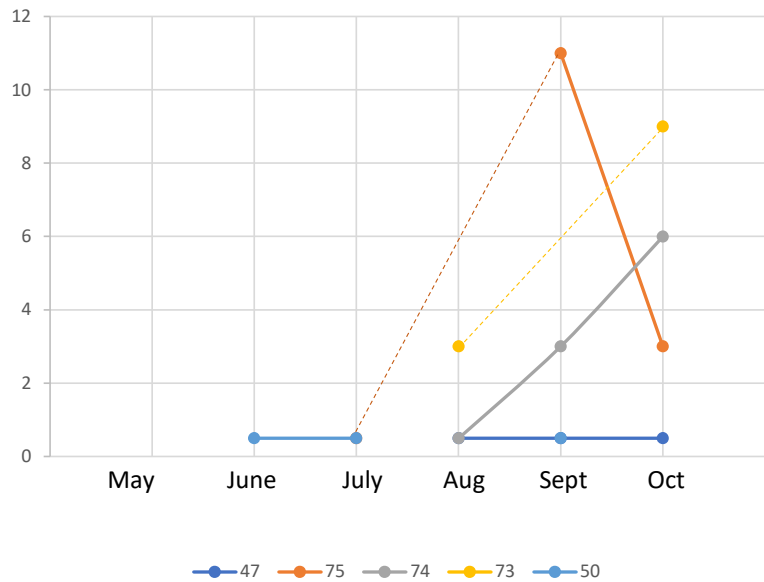
Hive #	May	June	July	Aug	Sept	Oct	Number Months Treated
8	'0-1	'0-1	'2-4		'2-4	'0-1	1
33	'0-1	'0-1	'0-1	'0-1	11+	11+	0
60		'0-1	'0-1		'0-1	'2-4	0

Small Sample Size – but 2 of the 3 NUCs had increased mite counts as brood started increasing

*dotted lines indicate no report in the month

Mite Counts –Hives w/ Sept & Oct reports– Splits

2019 Splits



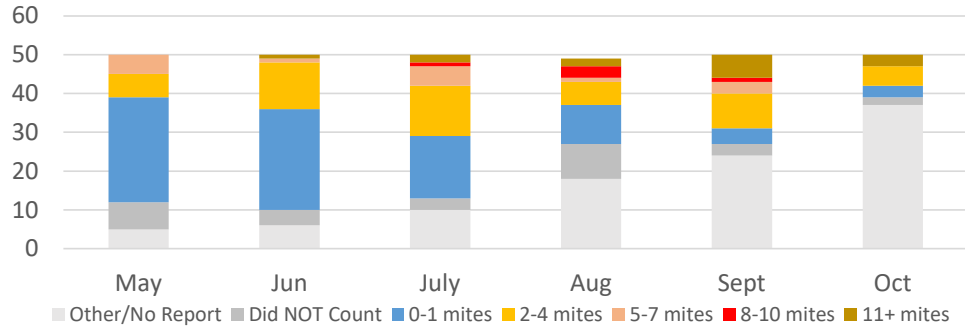
*dotted lines indicate no report in the month

Hive #	May	June	July	Aug	Sept	Oct	Number Months Treatments
47				'0-1	'0-1	'0-1	1
75			'0-1		11+	'2-4	3
74				'0-1	'2-4	'5-7	2
73				'2-4		'8-10	2
50		'0-1	'0-1		'0-1		2

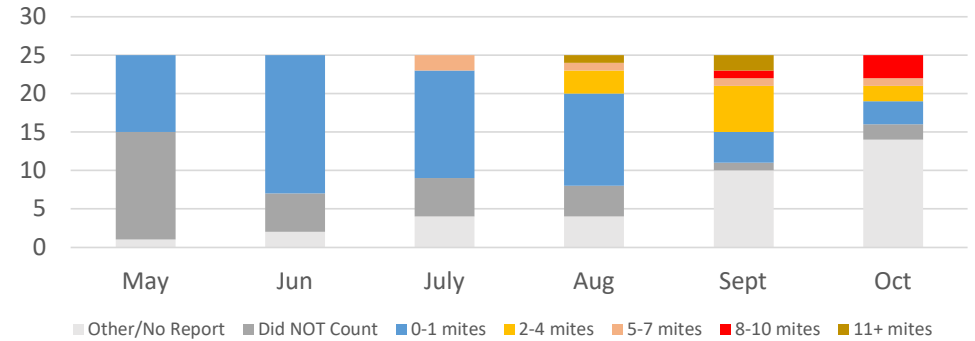
Small Sample Size – but some increased mite counts as brood started increasing

Mite Counts – By Source

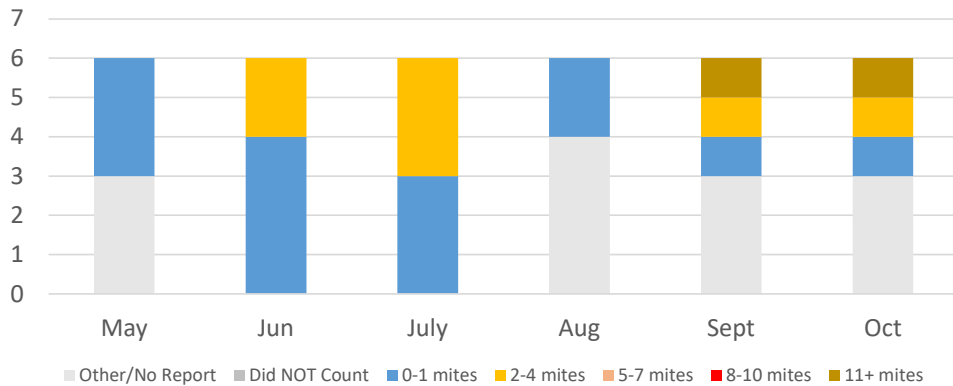
OverWintered



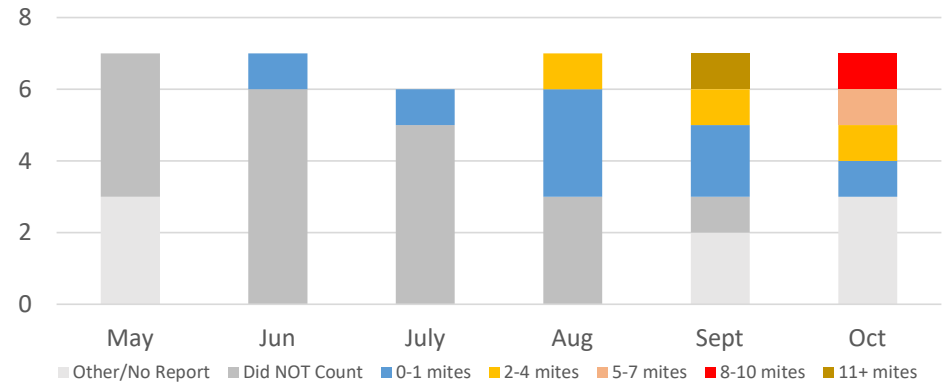
2019 Pkgs



2019 NUC



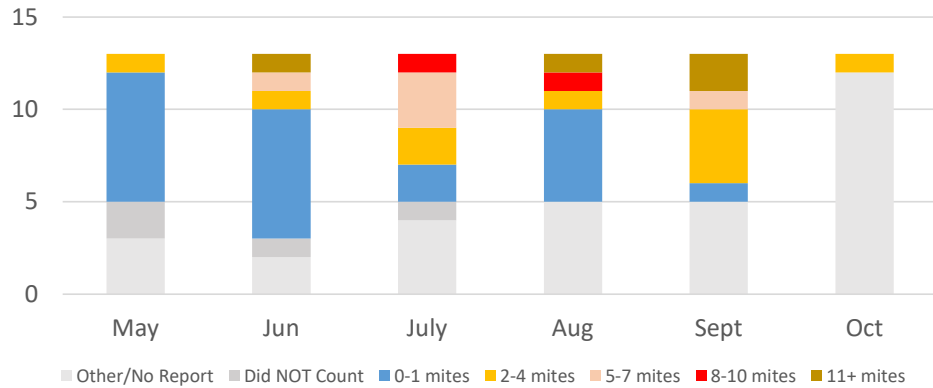
2019 Split



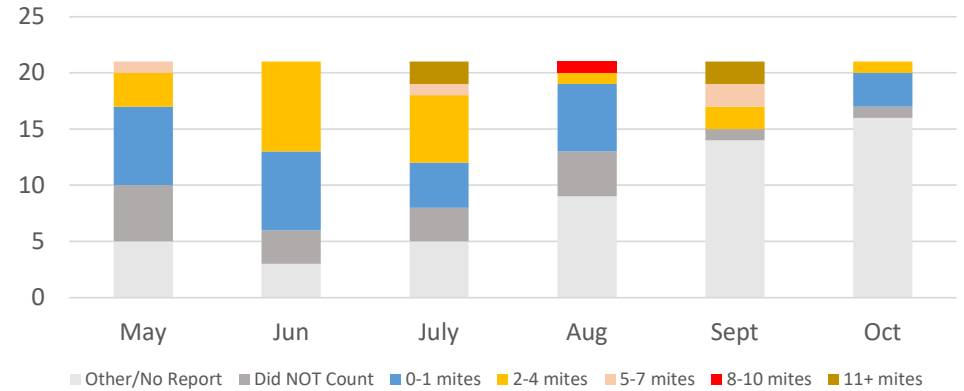
As expected, overwintered hives had the highest mite counts, but by July/August Package counts were also getting high.

Mite Counts – By Race (all reports)

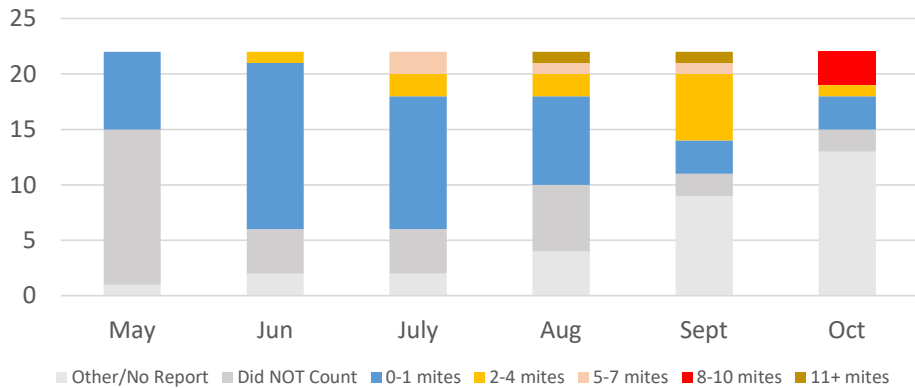
Italian



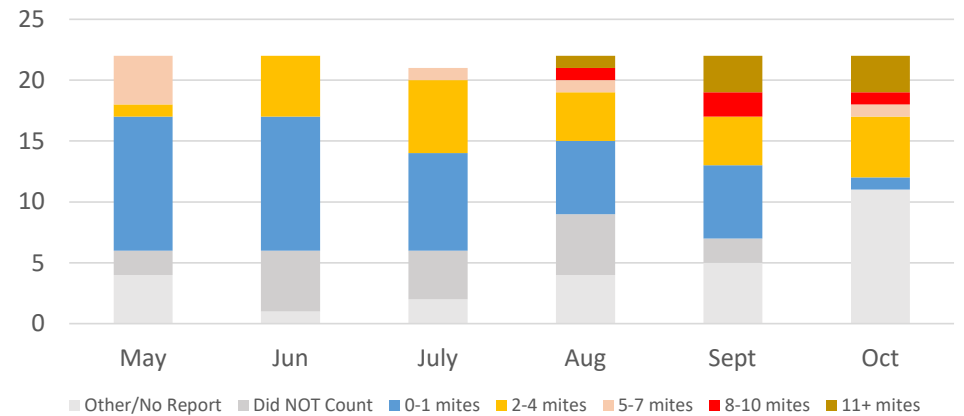
Carni



Saskatraz

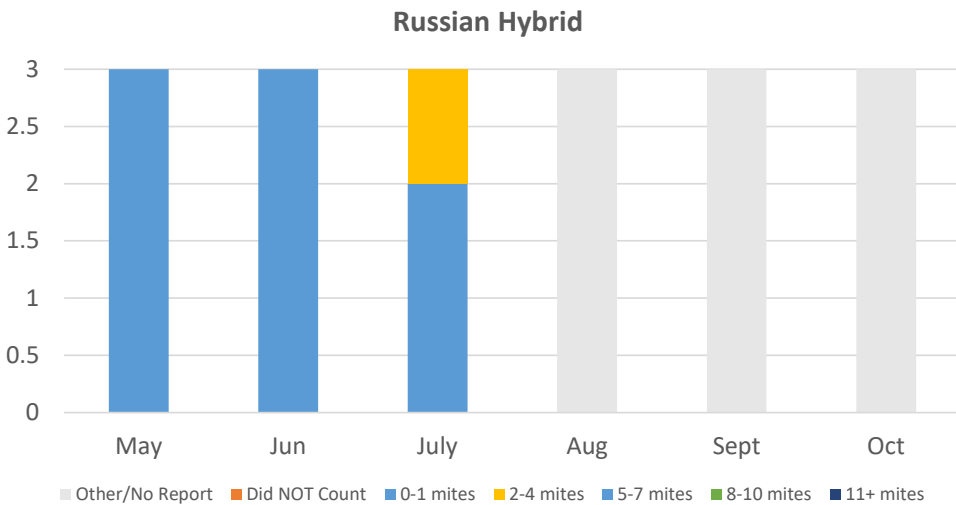


Northern

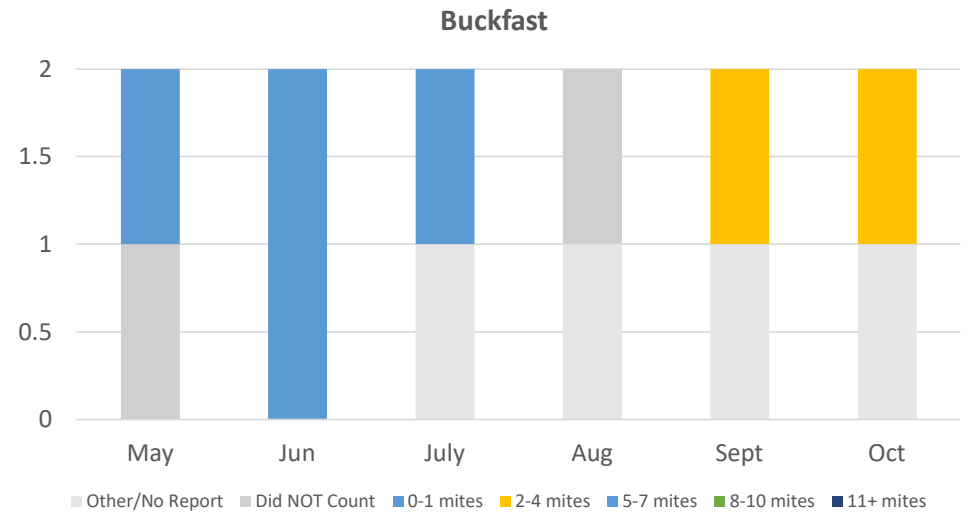


All races show high mite counts by mid-late Summer

Mite Counts – By Race (continued)



No reports after July



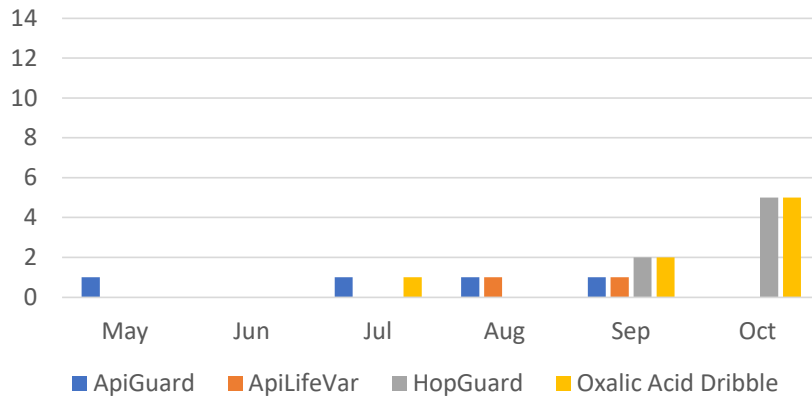
1 hive with reports for all months – this hive was treated in Aug & Sept

1 hive with reports for May & June only

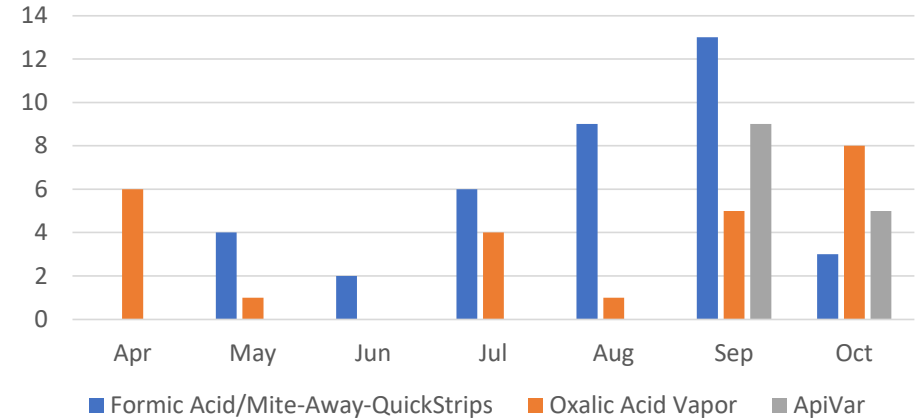
Difficult to draw any conclusions due to small numbers of hives

Mite Treatments – All reports

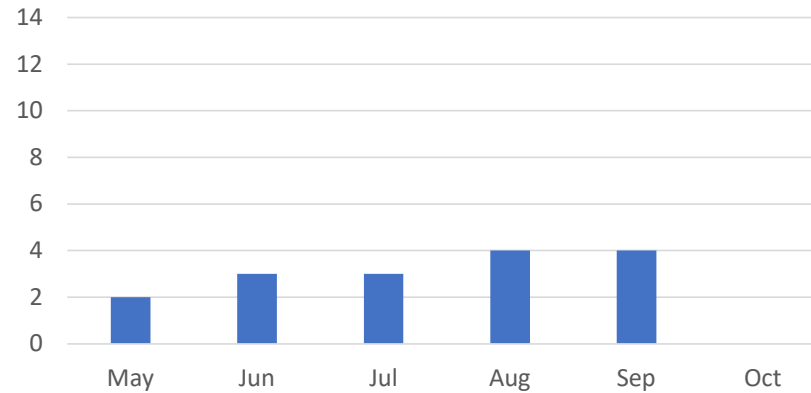
Treatments - Apiguard, ApiLifeVar, HopGuard, OA Dribble



Treatments - Formic/MAQS, OA Vapor, ApiVar



Treatments - Other



58 colonies report doing treatment at least once between April → Oct

Other includes:

- 3 treatments Honey Bee Cleanse every 4 days
- Pro Formula
- Sugar Bath
- Mineral Oil Fog
- Essential Oil Fog

Formic Acid/MAQS and OA Vapor were the most common forms of treatment.

Mite Treatments Levels

of hives treated at the Given Mite Count

	May	Jun	Jul	Aug	Sep	October
0-1 Mites	2	2	3	3	6	5
2-4 Mites	-	1	6	1	7	5
5-7 Mites	5	-	2	1	1	1
8-10 Mites	-	-	-	2	1	3
11+ Mites	-	1	1	1	2	3

Mite Count Change in the Month Following Treatment*

	May-->June	June-->July	July->Aug	Aug->Sept	Sept->Oct
0-1 Mites	NC: 2	NC: 2	NC: 1	INC: 2 NC: 2	INC: 4 NC: 1
2-4 Mites		NC: 1	INC: 3 NC: 2	NC: 1	DEC: 1 INC: 3 NC: 2
5-7 Mites	DEC: 5			DEC: 1	INC: 1
8-10 Mites				DEC: 1 INC: 1	DEC: 1
11+ Mites		DEC: 1		INC: 1	DEC: 2

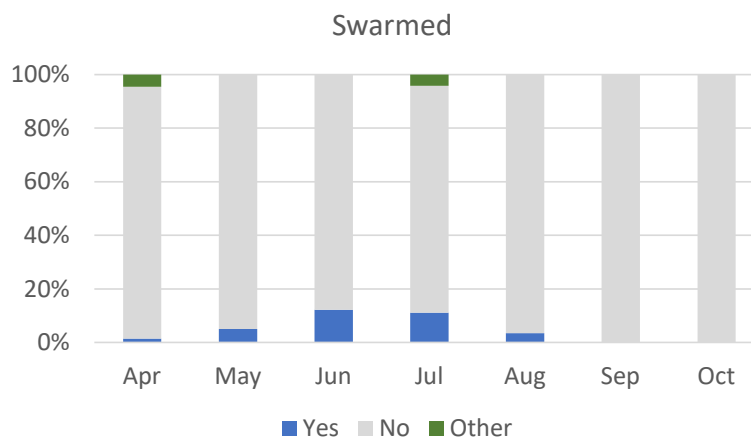
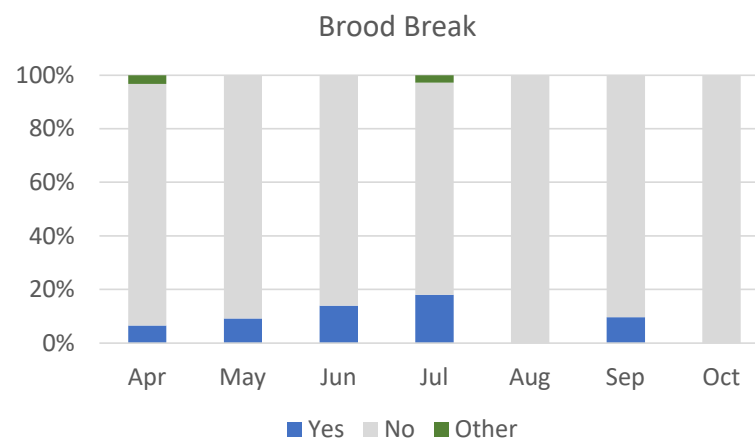
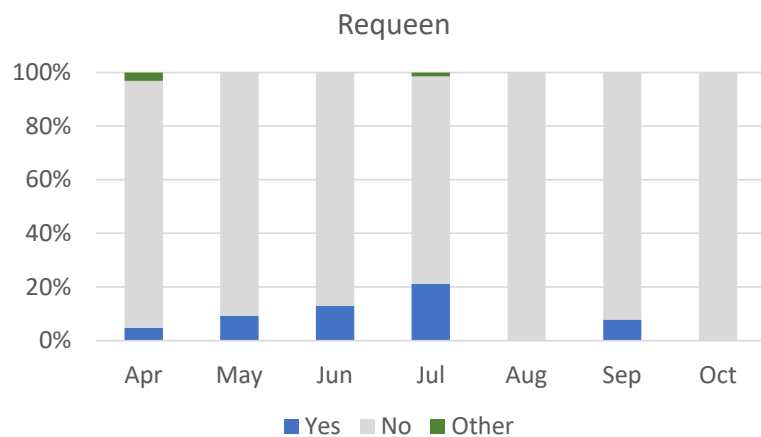
NC = No change in mite count in the following month
 INC = increase in mite count in the following month
 DEC = decrease in the mite count in the following month

Many hives were treated when they were well below the 3% threshold level. (Possibly because they were in apiaries with hives with high counts?)

Treatment efficacy varied greatly. Some treatments appear to allow the hive to maintain the current levels. More details on monthly changes starting on page 18

*Note: Counts in this table don't always match the table on the left because not all hives that were treated in 1 month reported counts in the following month

Requeening, Swarming, Brood Break – All reports



These graphs show the percentage of reported hives each month that were requeened, that swarmed and had brood breaks

Brood Breaks were generally tied to requeening and swarming.

Month-to-Month Mite Change :

Is it Predictable?

How does treatment affect it?

How does swarming/brood break/requeening affect it?

Mite Count - Month-to-Month Change

The next group of charts shows the change in counts from one month next.

Each page represents the change from one month to the next (May→June, June→July, etc..)

Each graph shows how the mite counts changed from one month to the next for the hives in the category.

The chart on the right represents all of the hives (7 total) that reported a mite count of 0-1 in September and had an October report. It shows that for mite counts changes as follows: (right to left)

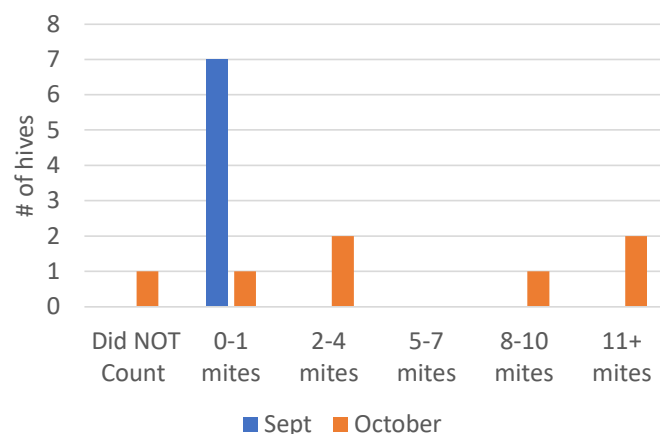
- The count on 2 hives changes from 0-1→ 11+
- The count on 1 hives changes from 0-1→ 8-10
- The count on 2 hives changes from 0-1→ 2-4
- The count on 1 hives was still 0-1
- 1 hive had a Sept Count of 0-1 and did not count in Oct.

You will see some graphs with a negative number of hives – this represents the mite counts decreasing for that hive

Each section also has a table listing the number of hives which reported various management activity in that month (treating, requeening, etc.). For each activity, the tables shows the total # of hives that took the action, the number of hives that took the action and had a lower mite count the next month, had an increased mite count the next month and had no change. Note the total number is sometimes more than the sum of the other three columns because not all hives reported mite counts in the following month

*Note – some hive had multiple management actions in a month.

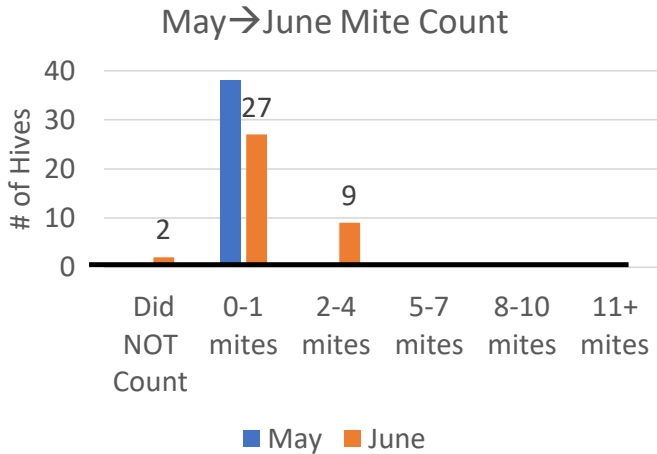
Oct Mite Cnt for hives with Sept Cnt 0-1 mites



Sept Mgmt Activity	Total # Hives in Sept with Mite Cnt 0-1	# of Hives that Reduced Count in Oct	# of Hives that Increased Count in Oct	# of Hives with no Change in Count in Oct
No Action	1	0	1	0
treated	6	0	4	1
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

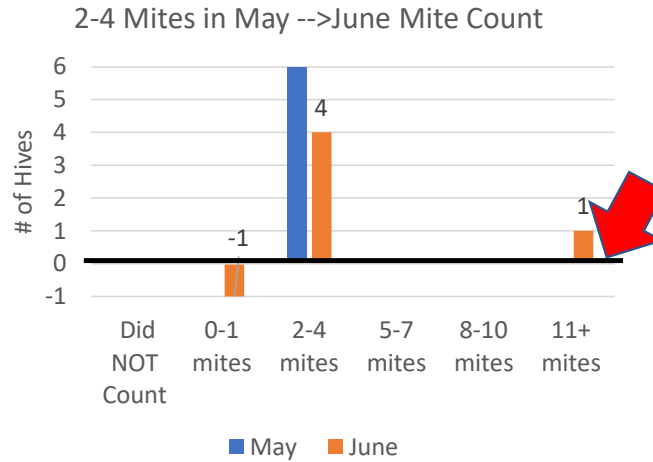
Mite Count Change May→June

Hives with May Mite Count = 0-1



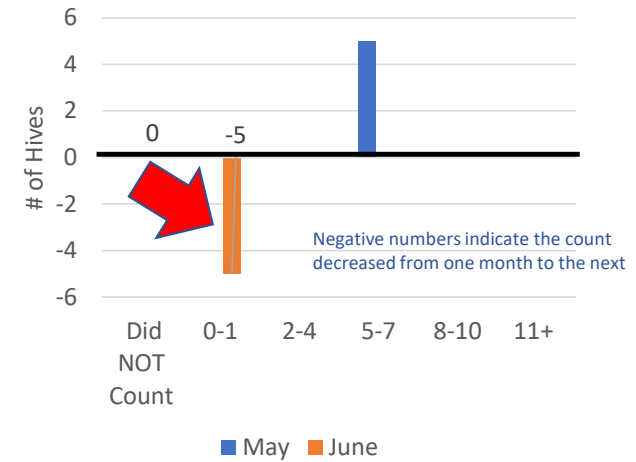
May Mgmt Activity	Total # Hives in May with mite count 0-1	# of Hives that Reduced Count in June	# of Hives that Increased Count in June	# of Hives with no Change in Count in June
No Action	33	0	8	23
treated	2	0	0	2
requeened	2	0	1	1
broodBreak	3	0	1	2
swarmed	3	0	1	2

Hives with May Mite Count = 2-4



May Mgmt Activity	Total # Hives in May with mite cnt 2-4	# of Hives that Reduced Count in June	# of Hives that Increased Count in June	# of Hives with no Change in Count in June
No Action	6	1	1	4
treated	0	0	0	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Hives with May Mite Count = 5-7



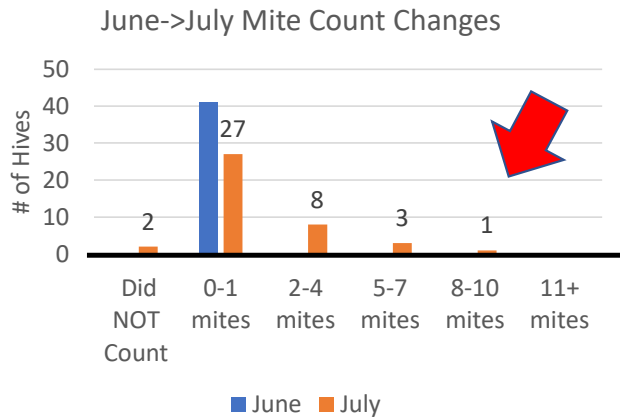
May Mgmt Activity	Total # Hives in May with mite cnt 5-7	# of Hives that Reduced Count	# of Hives that Increased Count	# of Hives with no Change in Count in June
No Action	0	0	0	0
treated	5	5	0	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Negative numbers
Indicate a drop in mites
since the previous month

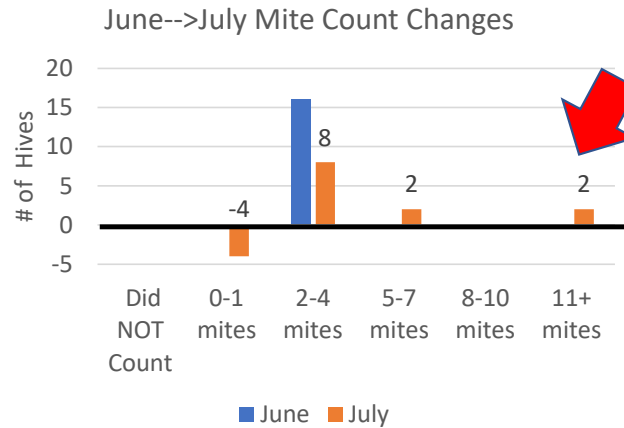
Treatment in the 5-7 mite group in May reduced the number of Mites in June
There were no counts > 7 in the May

Mite Count Change June → July

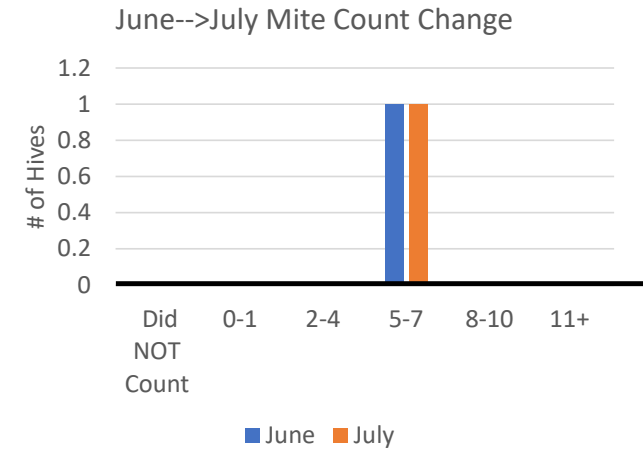
Hives with June Mite Count = 0-1



Hives with June Mite Count = 2-4



Hives with June Mite Count = 5-7



June Mgmt Activity	Total # Hives in June with mite count 0-1	# of Hives that Reduced Count in July	# of Hives that Increased Count in July	# of Hives with no Change in Count in July
No Action	34	0	7	25
treated	2	0	0	2
requeened	2	0	2	0
broodBreak	2	0	2	0
swarmed	4	0	4	0

June Mgmt Activity	Total # Hives in June with mite count 2-4	# of Hives that Reduced Count in July	# of Hives that Increased Count in July	# of Hives with no Change in Count in July
No Action	12	3	4	5
treated	1	0	0	1
requeened	1	0	0	1
broodBreak	1	0	0	1
swarmed	4	1	0	3

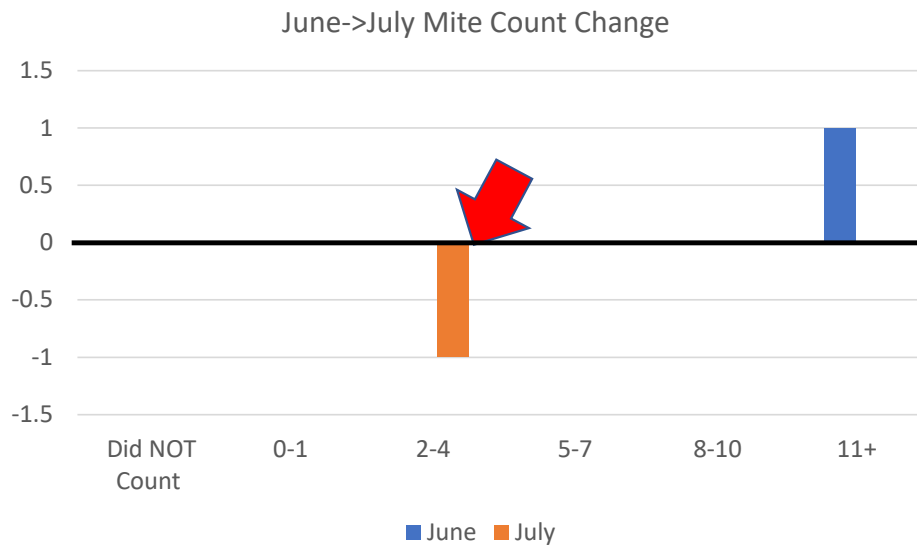
June Mgmt Activity	Total # Hives in June with mite count 5-7	# of Hives that Reduced Count in July	# of Hives that Increased Count in July	# of Hives with no Change in Count in July
No Action	1	0	0	1
treated	0	0	0	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

*Negative numbers Indicate a drop in mites since the previous month *** Some hives have multiple mgmt. activities

1 hive that swarmed in June (2-4 group) had a reduced count in July
 Several hives had significant jumps in counts from 0-1 in June to > 5 in July and 2-4 in June to 11+ in July

Mite Count Change June → July

Hives with July Mite Count = 11+



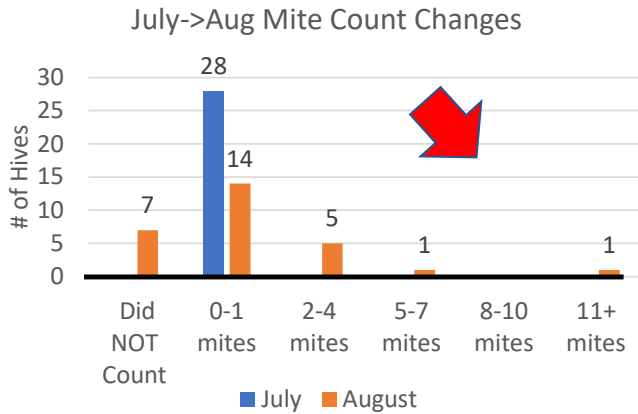
June Mgmt Activity	Total # Hives in June with mite count 11+	# of Hives that Reduced Count in July	# of Hives that Increased Count in July	# of Hives with no Change in Count in July
No Action	0	0	0	0
treated	1	1	0	0
requeened	1	1	0	0
broodBreak	1	1	0	0
swarmed	1	1	0	0

Negative numbers
Indicate a drop in mites
since the previous month

One Hive had a count of 11+ in June.
It was treated and swarmed resulting in requeening and a brood break. Its mites reduced to 2-4 in July
There were no counts > 8-10 in the June

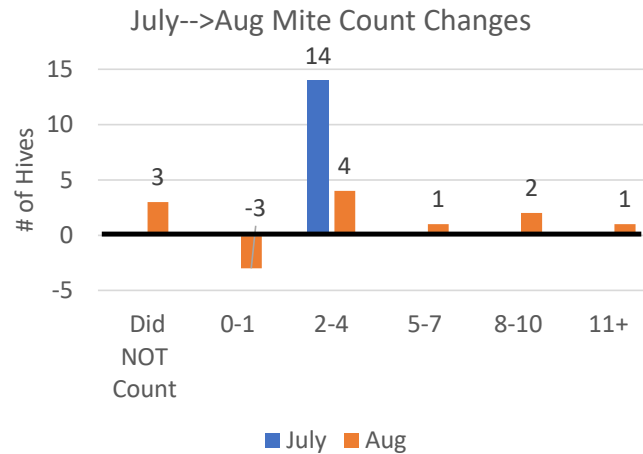
Mite Count Change July → Aug

Hives with July Mite Count = 0-1



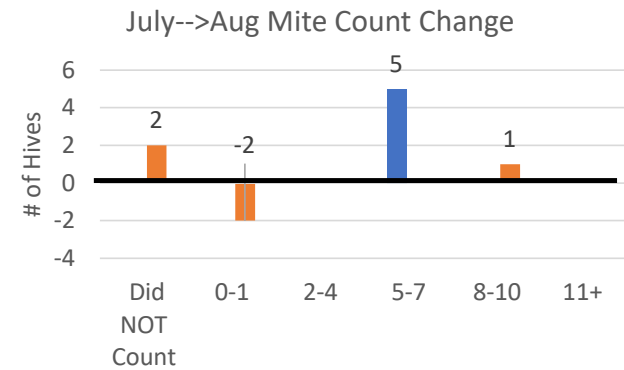
July Mgmt Activity	Total # Hives in July with mite count 0-1	# of Hives that Reduced Count in Aug	# of Hives that Increased Count in Aug	# of Hives with no Change in Count in Aug
No Action	19	0	5	10
treated	3	0	0	1
requeened	6	0	1	3
broodBreak	5	0	1	2
swarmed	3	0	1	1

Hives with July Mite Count = 2-4



July Mgmt Activity	Total # Hives in July with mite count 2-4	# of Hives that Reduced Count in Aug	# of Hives that Increased Count in Aug	# of Hives with no Change in Count in Aug
No Action	7	3	1	1
treated	6	0	3	2
requeened	2	0	1	0
brood Break	2	0	1	0
swarmed	2	0	0	1

Hives with July Mite Count = 5-7



July Mgmt Activity	Total # Hives in July with mite count 5-7	# of Hives that Reduced Count in Aug	# of Hives that Increased Count in Aug	# of Hives with no Change in Count in Aug
No Action	1	0	1	0
treated	2	0	0	0
requeened	2	1	0	0
brood Break	1	0	0	0
swarmed	2	1	0	0

Negative numbers
Indicate a drop in mites
since the previous month

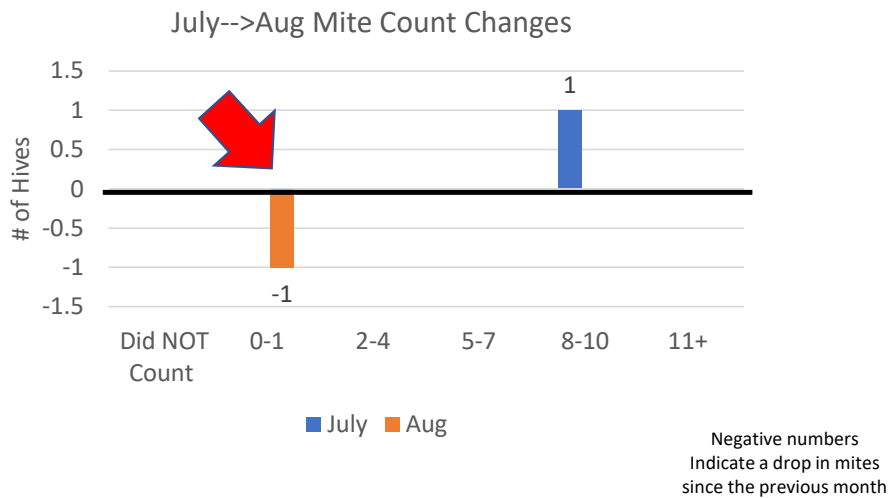
Significant increase in mite counts in August

Some treated hives actually increased in counts from July → Aug

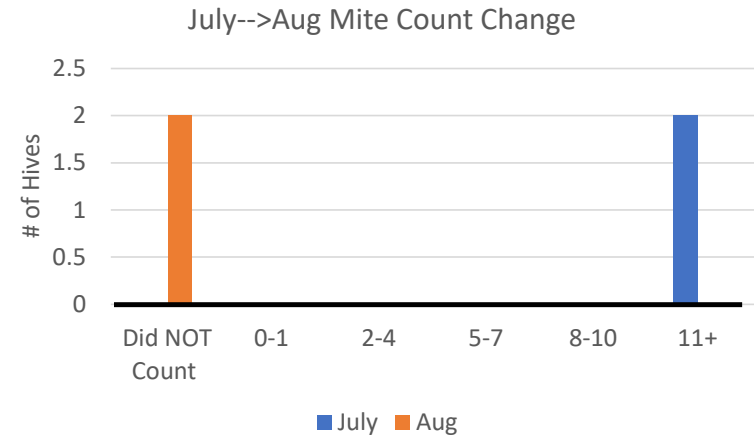
May hives that were treated or had a brood break/requeened/swarm stayed at the same mite level

Mite Count Change July → Aug

Hives with July Mite Count = 8-10



Hives with July Mite Count = 11+



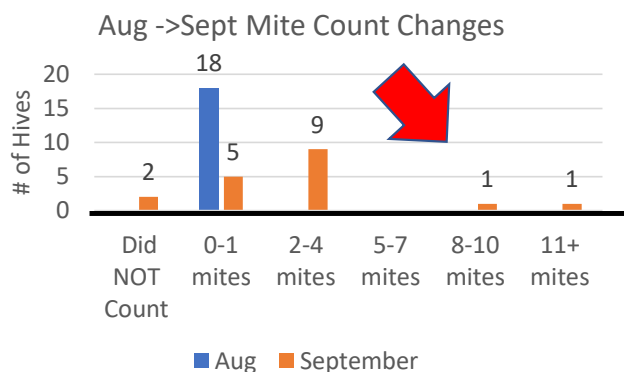
July Mgmt Activity	Total # Hives in July with Mite Cnt 8-10	# of Hives that Reduced Count in August	# of Hives that Increased Count in August	# of Hives with no Change in Count in Aug
No Action	0	0	0	0
treated	0	0	0	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	1	1	0	0

July Mgmt Activity	Total # Hives in July with Mite Cnt 11+	# of Hives that Reduced Count in August	# of Hives that Increased Count in August	# of Hives with no Change in Count in Aug
No Action	0	0	0	0
treated	1	0	0	0
requeened	1	0	0	0
broodBreak	1	0	0	0
swarmed	1	0	0	0

A hive with 8-10 mite count in July Swarmed and had a mite count of 0-1 in August
 The hives with mite counts of 11+ were treated, requeened and had a brood break (1 swarmed). Mites were not counted in August

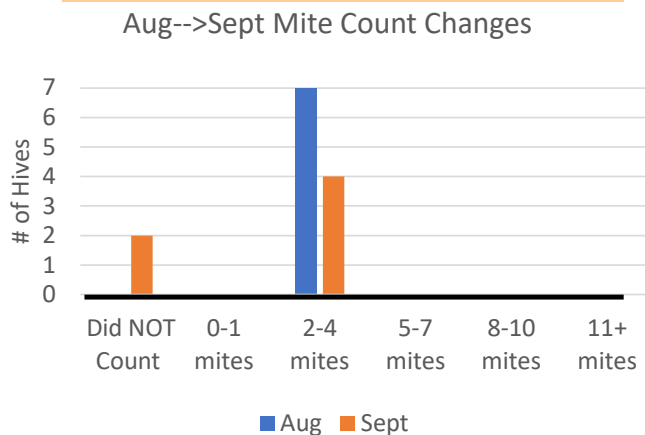
Mite Count Change Aug → Sept

Hives with Aug Mite Count = 0-1



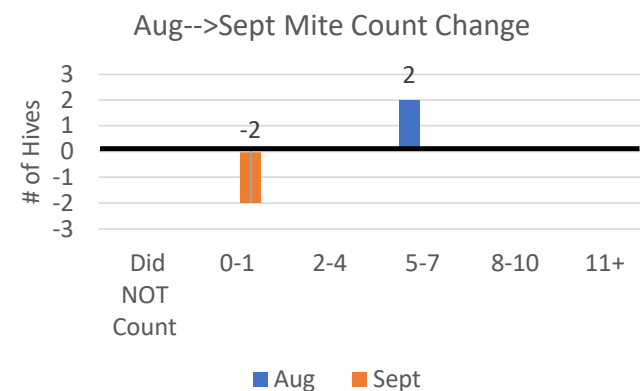
Aug Mgmt Activity	Total # Hives in Aug with Mite Cnt 0-1	# of Hives that Reduced Count in Sept	# of Hives that Increased Count in Sept	# of Hives with no Change in Count in Sept
No Action	15	0	9	4
treated	3	0	2	1
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Hives with Aug Mite Count = 2-4



Aug Mgmt Activity	Total # Hives in Aug with Mite Cnt 2-4	# of Hives that Reduced Count in Sept	# of Hives that Increased Count in Sept	# of Hives with no Change in Count in Sept
No Action	6	0	0	3
treated	1	0	0	1
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Hives with Aug Mite Count = 5-7



Aug Mgmt Activity	Total # Hives in Aug with Mite Cnt 5-7	# of Hives that Reduced Count in Sept	# of Hives that Increased Count in Sept	# of Hives with no Change in Count in Sept
No Action	1	1	0	0
treated	1	1	0	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

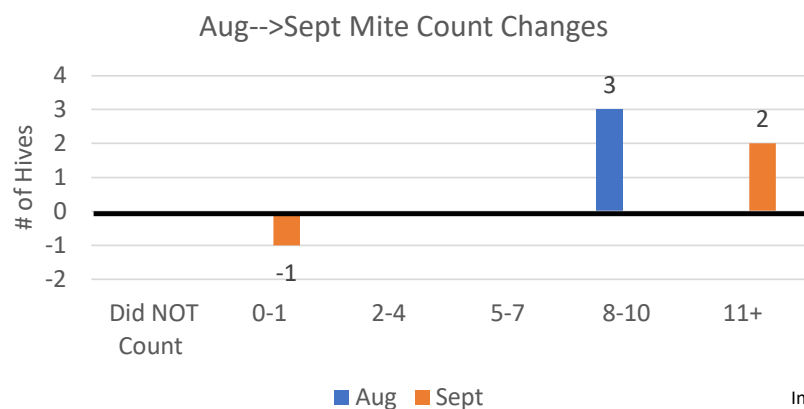
Negative numbers
Indicate a drop in mites
since the previous month

➤ 2/3 of the hives with a 0-1 count in August had increased mite count in September

* One of the hives with 5-7 August count was treated in Sept with Formic Acid which may account for the drop in mite count depending on when the count was done relative to the treatment

Mite Count Change Aug→Sept

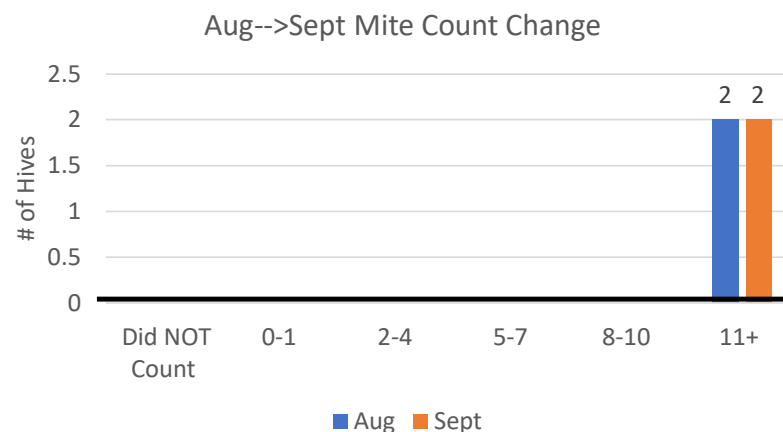
Hives with Aug Mite Count = 8-10



Negative numbers
Indicate a drop in mites
since the previous month

Aug Mgmt Activity	Total # Hives in Aug with Mite Cnt 8-10	# of Hives that Reduced Count In Sept	# of Hives that Increased Count in Sept	# of Hives with no Change in Count in Sept
No Action	1	0	1	0
treated	2	1	1	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Hives with Aug Mite Count = 11+

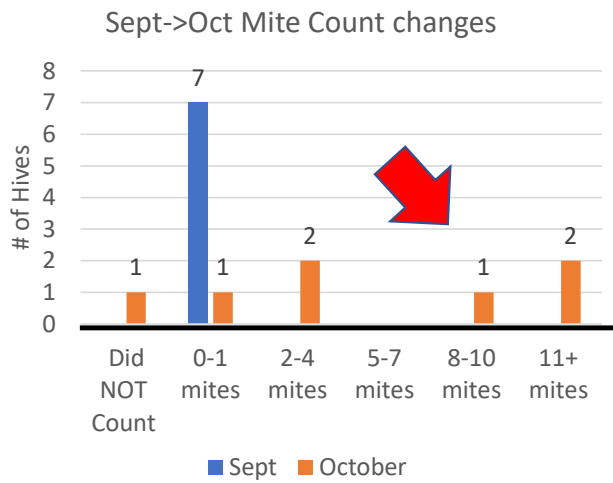


Aug Mgmt Activity	Total # Hives in Aug with Mite Cnt 11+	# of Hives that Reduced Count in Sept	# of Hives that Increased Count in Sept	# of Hives with no Change in Count in Sept
No Action	1	0	0	1
treated	1	0	0	1
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

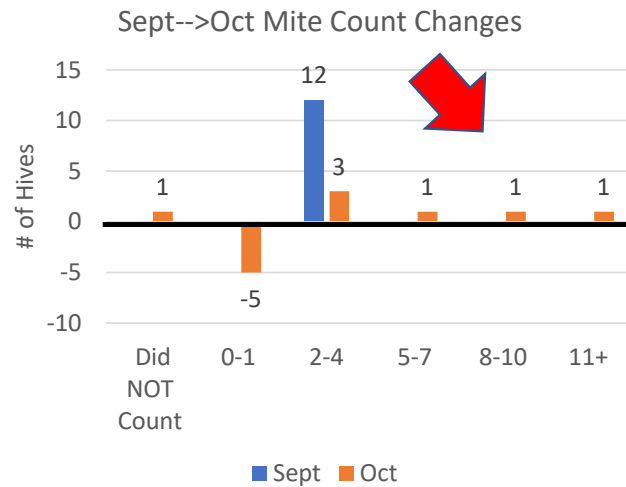
Treatment reduced mite count in some hives but not others.
1 treated hive increased from 8-10 mites to 11+ in Sept.

Mite Count Change Sept → Oct

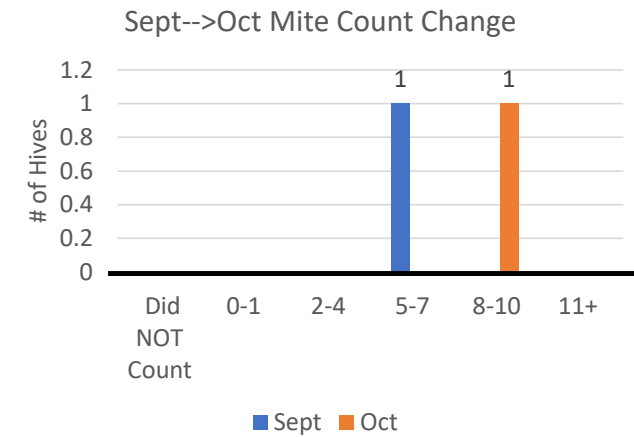
Hives with Sept Mite Count = 0-1



Hives with Sept Mite Count = 2-4



Hives with Sept Mite Count = 5-7



Sept Mgmt Activity	Total # Hives in Sept with Mite Cnt 0-1	# of Hives that Reduced Count in Oct	# of Hives that Increased Count in Oct	# of Hives with no Change in Count in Oct
No Action	1	0	1	0
treated	6	0	4	1
requeneed	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Sept Mgmt Activity	Total # Hives in Sept with Mite Cnt 2-4	# of Hives that Reduced Count in Oct	# of Hives that Increased Count in Oct	# of Hives with no Change in Count in Oct
No Action	5	4	0	1
treated	7	1	3	2
requeneed	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

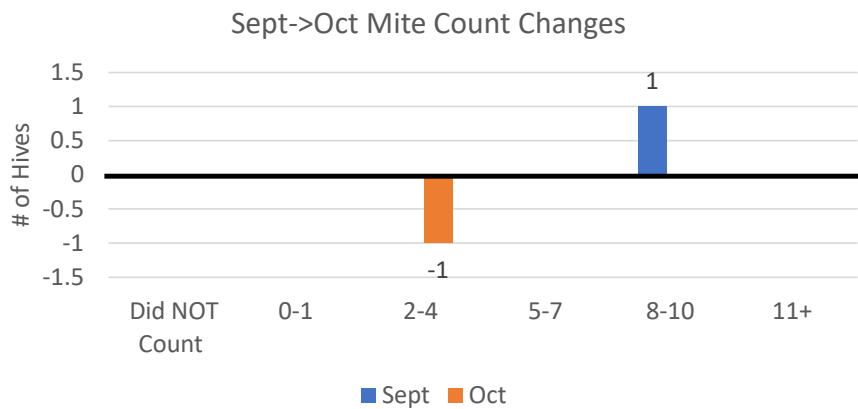
Sept Mgmt Activity	Total # Hives in Sept with Mite Cnt 5-7	# of Hives that Reduced Count in Oct	# of Hives that Increased Count in Oct	# of Hives with no Change in Count in Oct
No Action	0	0	0	0
treated	1	0	1	0
requeneed	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Negative numbers
Indicate a drop in mites
since the previous month

➤ 3 of 7 of the hives with a 0-1 count in Sept had mite counts of > 8 in Oct
➤ 4 hives that had a count of 2-4 in Sept reduced mite count with no treatment/swarm, etc. reported.

Mite Count Change Sept→Oct

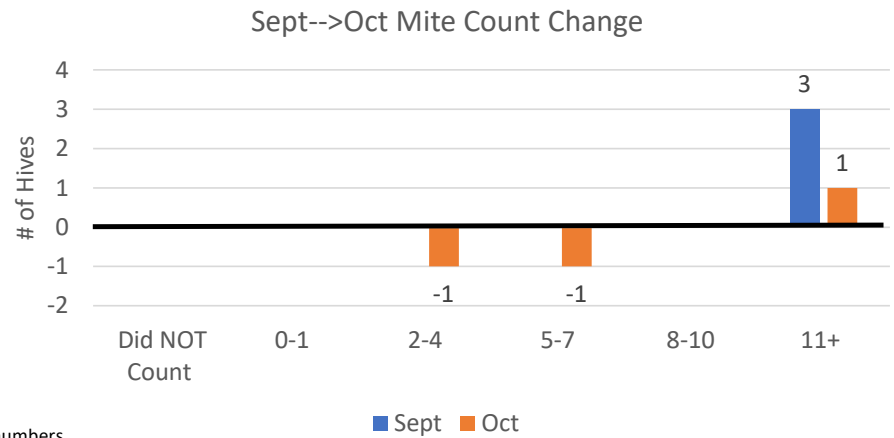
Hives with Sept Mite Count = 8-10



Sept Mgmt Activity	Total # Hives in Sept with Mite Cnt 8-10	# of Hives that Reduced Count in Oct	# of Hives that Increased Count in Oct	# of Hives with no Change in Count in Oct
No Action	0	0	0	0
treated	1	1	0	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

Negative numbers indicate a drop in mites since the previous month

Hives with Sept Mite Count = 11+



Sept Mgmt Activity	Total # Hives in Sept with Mite Cnt 11+	# of Hives that Reduced Count in Oct	# of Hives that Increased Count in Oct	# of Hives with no Change in Count in Oct
No Action	1	0	0	1
treated	2	2	0	0
requeened	0	0	0	0
broodBreak	0	0	0	0
swarmed	0	0	0	0

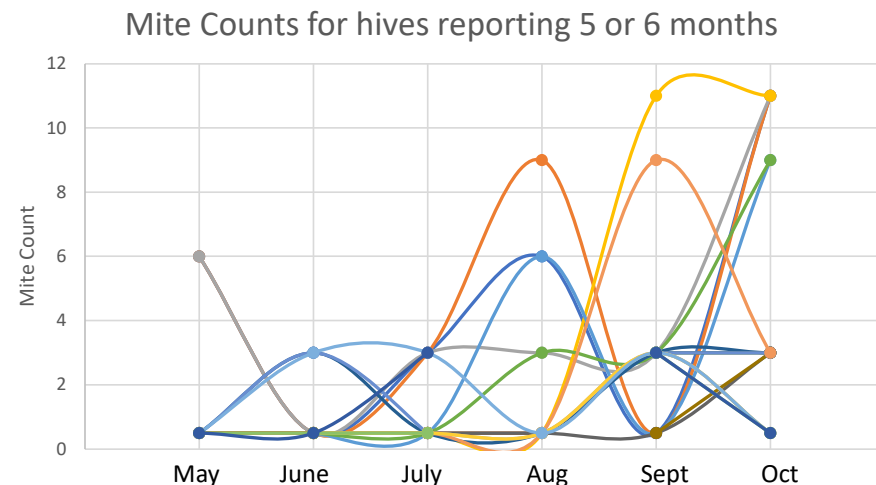
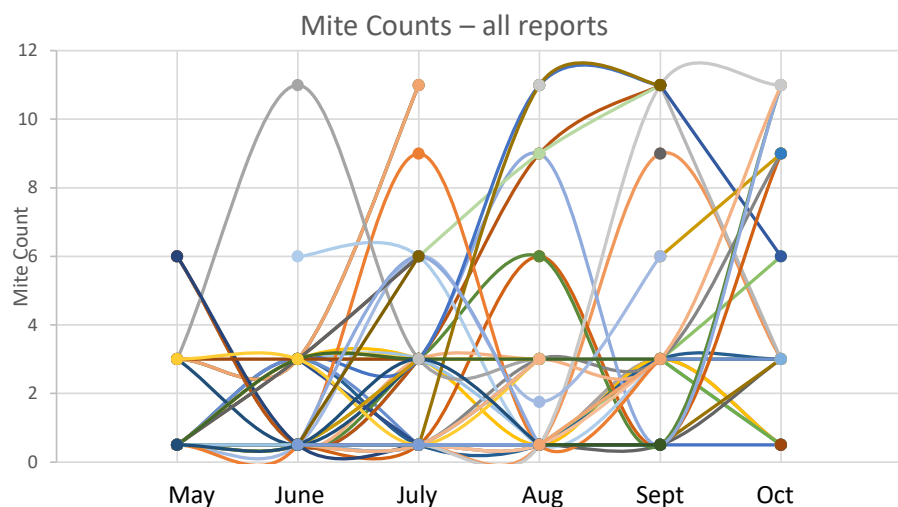
Most hives with 8+ mite counts that were treated reduced the count significantly

Mite Testing Mid-Project – 7-month Summary

- *Many colonies exhibited **BIG jumps in mite counts from month to month.***
- *Treatments:*
 - *knocked down counts in some hives*
 - *Appeared to keep the hive at its current count in others*
 - *Several hives saw increases in mite counts*
 - *it raises the question were treatments used correctly? Were the treatments strong enough (ex: 1 formic strip vs 2?)*
- *The **monthly mite count does not appear to be predictable** for a given colony no matter whether it was treated, requeened, swarmed or had a brood break.*
- *Primary Take-away: You cannot rely on other's data, and that doing your own testing in your own hives is critical. Even if it is after treatment, and especially in Sept-October.*

Backup

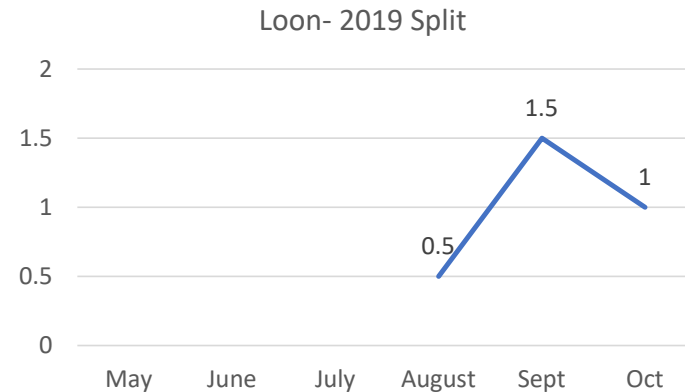
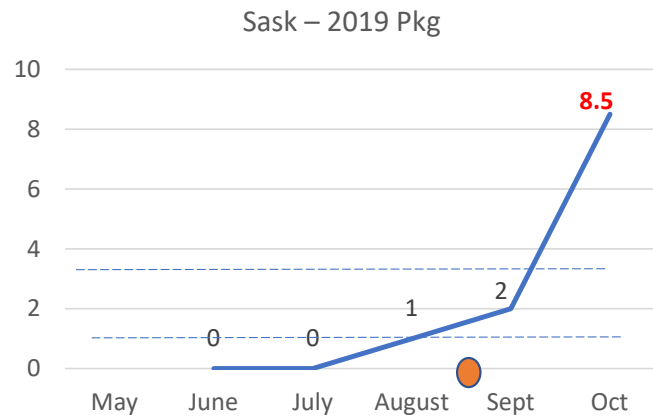
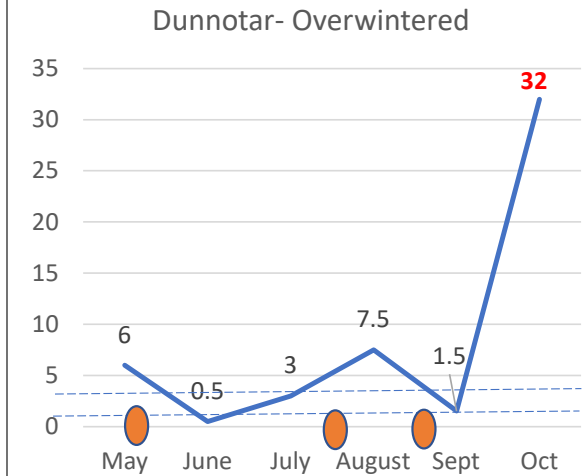
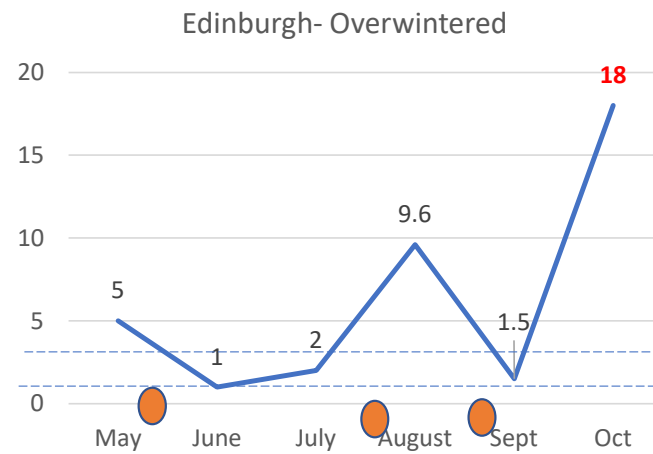
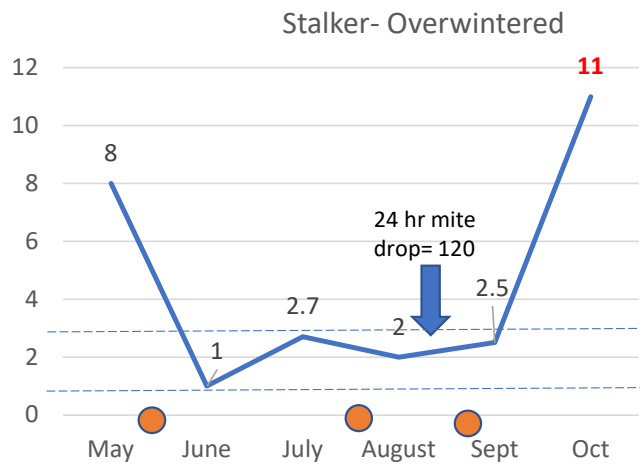
Mite Counts – All reports – Another view



	Apr	May	Jun	Jul	Aug	Sep	Oct
Did NOT Count	61	26	16	14	17	6	4
0-1 mites	4	43	50	34	27	11	8
2-4 mites	1	6	16	18	12	18	9
5-7 mites	1	5	1	7	2	4	2
8-10 mites				1	3	2	4
11+ mites			1	2	3	10	4
Total	67	80	84	76	64	51	31

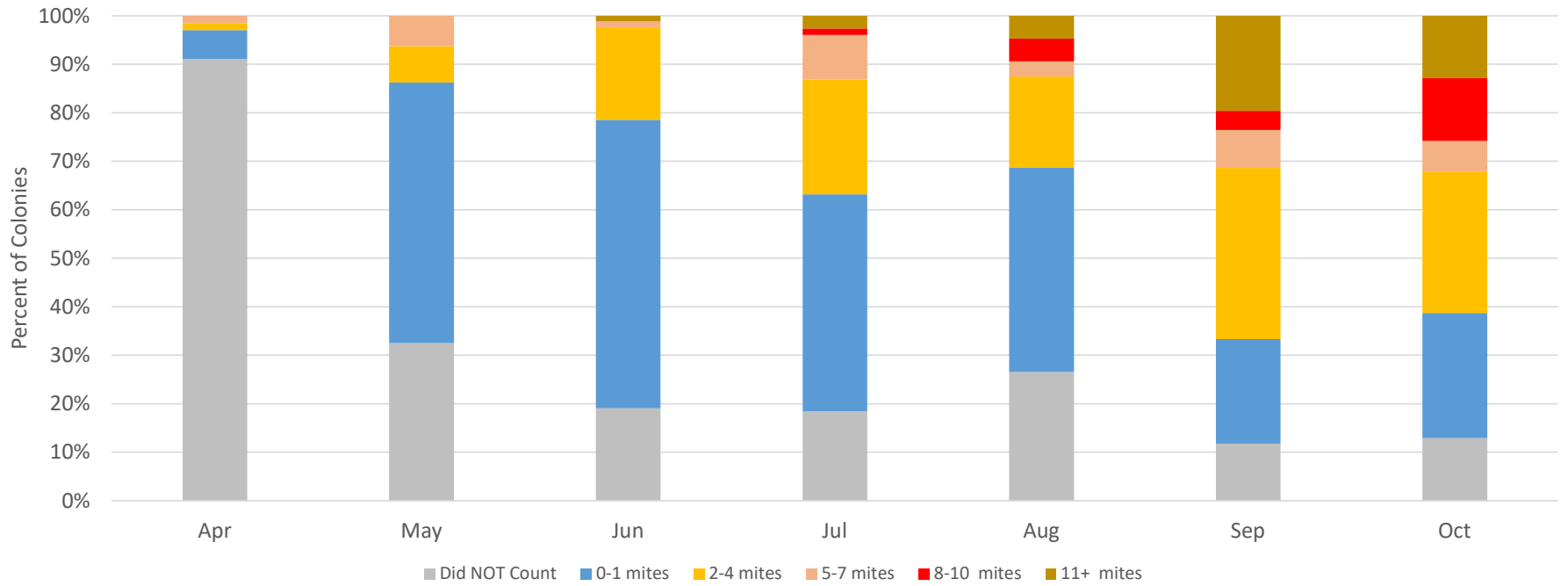
Notice the trend lines as the Summer progresses - You can see where treatments probably took place in Aug→Sept, but then a big jump Sept→Oct

2019 Mite Testing – My Mite Counts (Gilmanton)



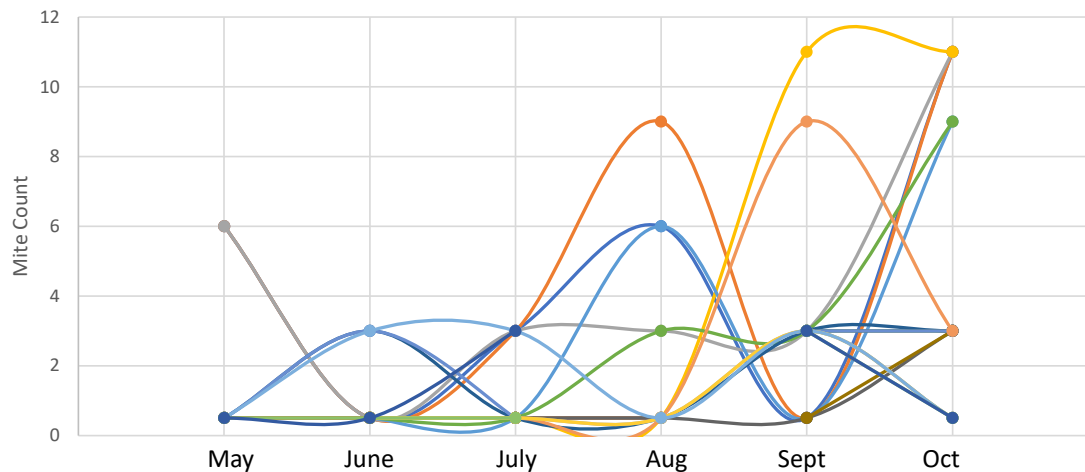
● = treatment applied

Mite Counts By Month – All reports



Mite Counts – All reports – Another view

Mite Counts for hives reporting 5 or 6 months

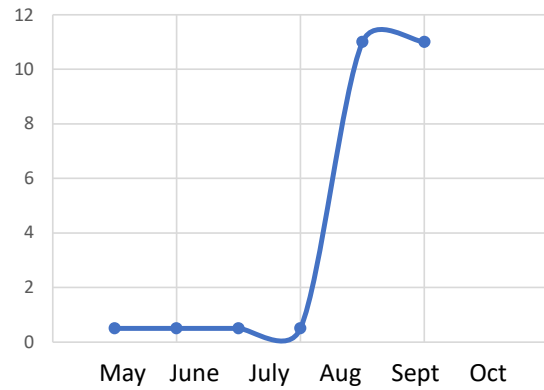


	Apr	May	Jun	Jul	Aug	Sep	Oct
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0-1 mites	4	43	50	34	27	11	8
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8-10 mites				1	3	2	4
11+ mites			1	2	3	10	4
Total	67	80	84	76	64	51	31

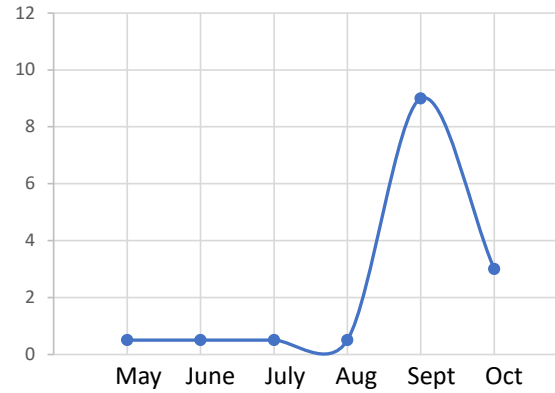
Notice the trend lines as the Summer progresses - You can see where treatments probably took place in Aug→Sept, but then a big jump Sept→Oct

Mite Counts – Another view

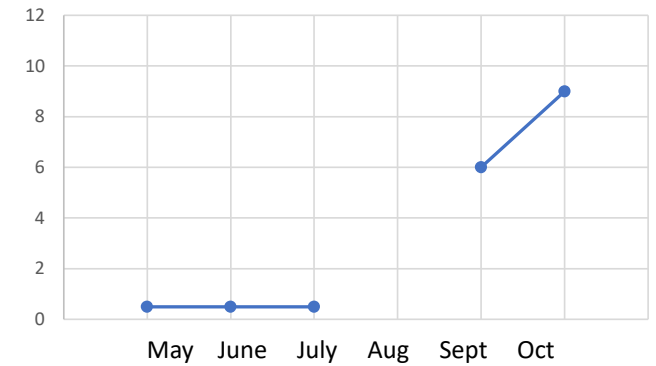
2019 NUC (no treatments)



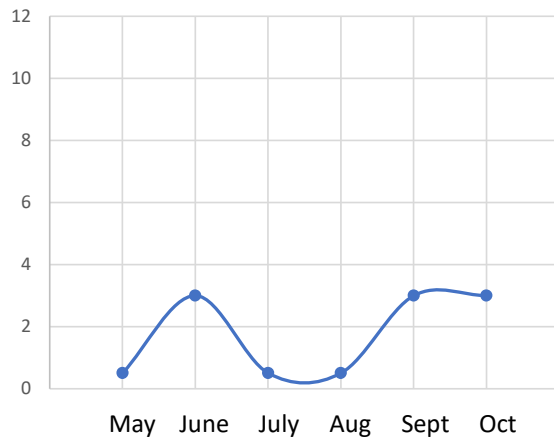
2019 Package (1 treatment-Sept)



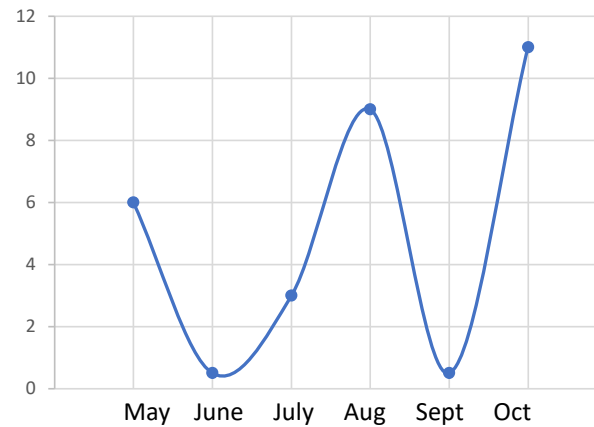
2019 package (1 treatment - Sept)



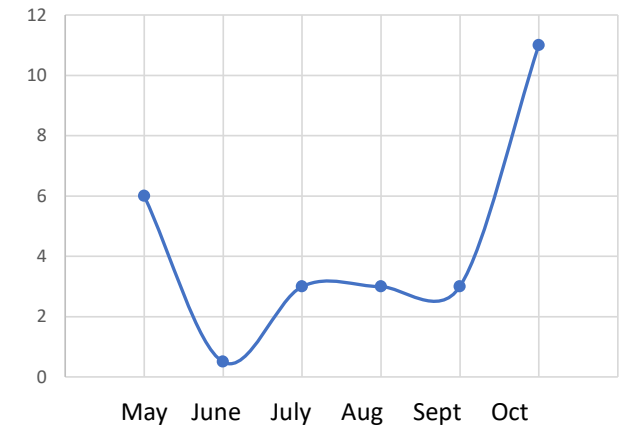
Over Wintered- Northern (2 treatments)



Over Wintered- Northern (3 treatments)

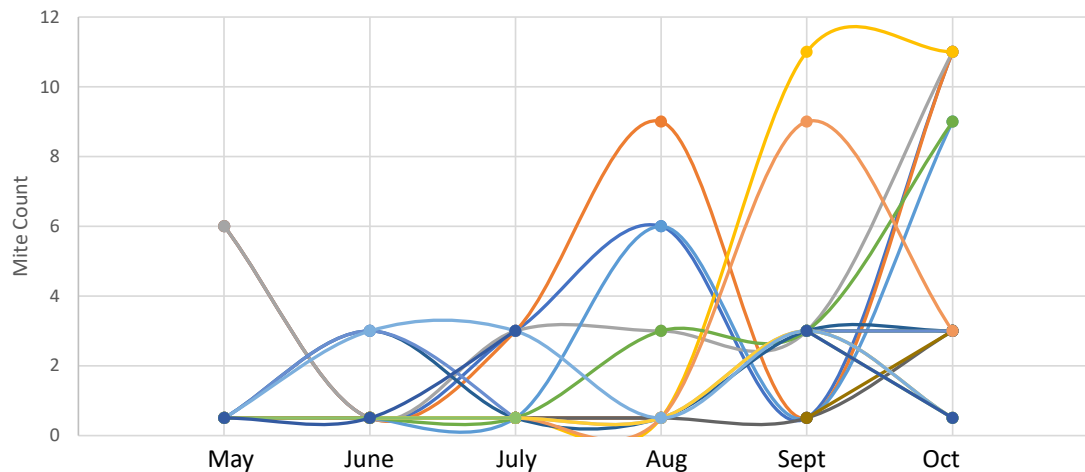


Over Wintered - Northern (3 treatments)



Mite Counts – All reports – Another view

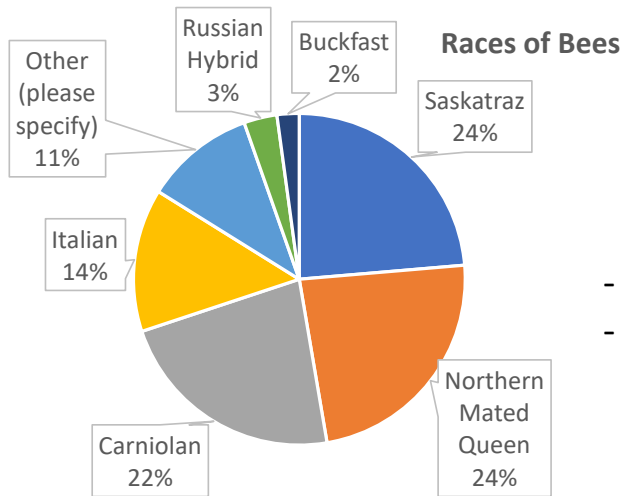
Mite Counts for hives reporting 5 or 6 months



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Did NOT Count	61	26	16	14	17	6	4
0-1 mites	4	43	50	34	27	11	8
2-4 mites	1	6	16	18	12	18	9
5-7 mites	1	5	1	7	2	4	2
8-10 mites				1	3	2	4
11+ mites			1	2	3	10	4
Total	67	80	84	76	64	51	31

Notice the trend lines as the Summer progresses - You can see where treatments probably took place in Aug→Sept, but then a big jump Sept→Oct

2019 NH Healthy Hive – Mite Testing



Primary Take-aways:

- You cannot rely on other's data
- Doing your own testing in your own hives is critical.
 - Even if it is after treatment, and especially in Sept-October.

