



beeinformed.org

Bee Informed Partnership Sentinel Apiary Report

Beekeeper: Year: 2019
Sample Kit Code: SAPZ

Report date: 08/29/19

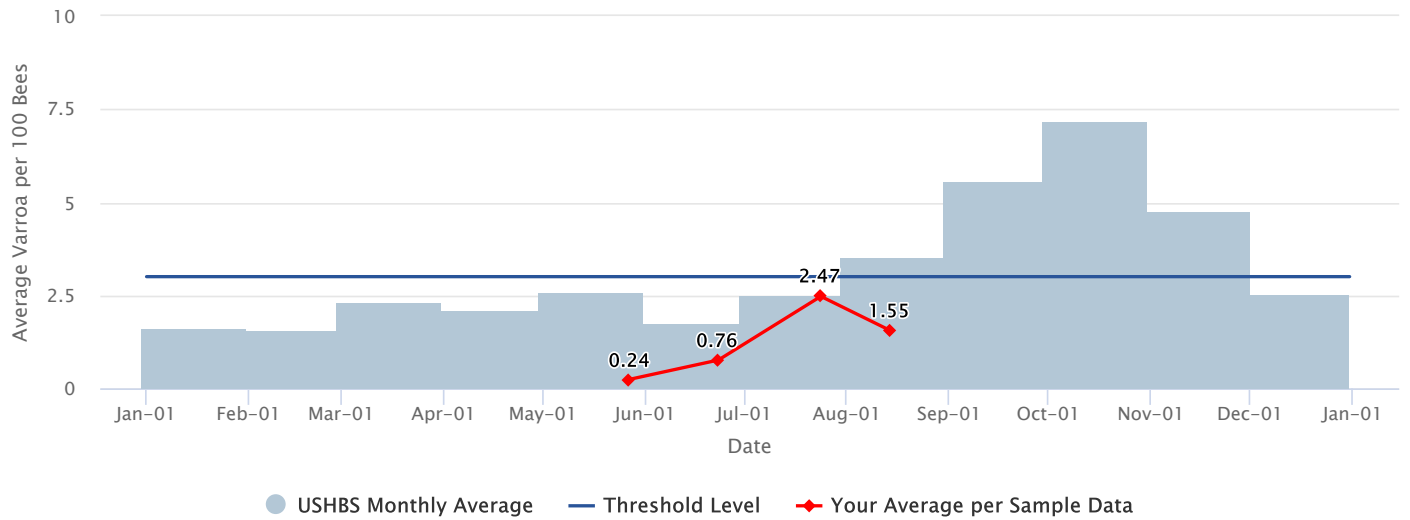
Varroa (mites per 100 bees)						
Hive	May	June	July	August	September	October
S19-SAPZ-1	0.3	0.0	0.3	0.6		
S19-SAPZ-2	0.0	0.0	2.1	0.5		
S19-SAPZ-3	0.3	1.6	0.0	2.1		
S19-SAPZ-4	0.0	0.4	1.7	0.6		
S19-SAPZ-5	0.0	1.4	0.8	0.3		
S19-SAPZ-6	0.4	1.1				
S19-SAPZ-7	0.9	0.0	8.9	2.3		
S19-SAPZ-8	0.0	1.6	3.8	1.6		
S19-SAPZ-9			2.1	4.4		
Your Monthly Average	0.24 ±0.26 (8)	0.76 ±0.61 (8)	2.47 ±2.41 (8)	1.55 ±1.16 (8)	0 ±0 (0)	0 ±0 (0)
USHBS Average	2.57 ±0.27 (569)	1.75 ±0.14 (996)	2.47 ±0.21 (833)	3.51 ±0.22 (1109)	5.54 ±0.36 (1133)	7.17 ±0.47 (946)
Tier4 Average	1.03 ±0.23 (379)	1.36 ±0.25 (388)	3.02 ±0.54 (367)	3.0 ±0.96 (108)	0 ±0 (0)	0 ±0 (0)
Tier4 Last Year Average	0.99 ±0.22 (458)	1.18 ±0.32 (502)	1.99 ±0.33 (495)	2.75 ±0.41 (475)	2.73 ±0.4 (420)	4.45 ±0.61 (365)

- Data presented: average ± 95% Confidence Interval (# of samples)
- The ± 95% Confidence Interval represents the range of expected values for 95% of the data. Observations outside this range may have occurred, but we consider those outliers and not representative of the majority of the data.
- Tier 4 Average, Last Year includes Tier 4 data starting in June 2013.
- APHIS Honey Bee Disease Survey is a national effort sponsored by USDA Animal and Plant Health Inspection Service (APHIS) in collaboration with the Agricultural Research Service (ARS) and University of Maryland (UMD). To date, the data provided for the APHIS monthly average is a composite of data from 2009 - Present.
- We consider => 5 mites per 100 bees (highlighted in red) as approaching a high threshold at or beyond where you may want to consider some varroa mite control strategy.
- If you collected two sets of samples within the same calendar month, they are reported in the two separate closest months in this table. Example, samples collected on May 30th may show up in the June column if you already have samples collected earlier in May.

Nosema (millions of spores per bee)						
Hive	May	June	July	August	September	October
S19-SAPZ-1	0.0	0.1	0.0	0.0		
S19-SAPZ-2	0.3	0.1	0.0	0.0		
S19-SAPZ-3	0.8	0.8	0.0	0.0		
S19-SAPZ-4	0.1	0.7	0.5	0.0		
S19-SAPZ-5	3.3	0.6	0.3	0.5		
S19-SAPZ-6	0.4	0.8				
S19-SAPZ-7	1.9	0.1	0.1	0.0		
S19-SAPZ-8	0.1	0.1	0.0	0.0		
S19-SAPZ-9			0.0	0.0		
Your Monthly Average	0.84 ±0.96 (8)	0.41 ±0.29 (8)	0.11 ±0.15 (8)	0.06 ±0.13 (8)	0 ±0 (0)	0 ±0 (0)
USHBS Average	0.55 ±0.1 (569)	0.34 ±0.04 (996)	0.23 ±0.04 (833)	0.14 ±0.03 (1110)	0.11 ±0.02 (1133)	0.16 ±0.03 (946)
Tier4 Average	1.21 ±0.23 (379)	0.45 ±0.11 (388)	0.2 ±0.06 (367)	0.18 ±0.08 (108)	0 ±0 (0)	0 ±0 (0)
Tier4 Last Year Average	1.05 ±0.17 (459)	0.49 ±0.11 (502)	0.12 ±0.05 (495)	0.14 ±0.05 (471)	0.29 ±0.14 (421)	0.22 ±0.06 (365)

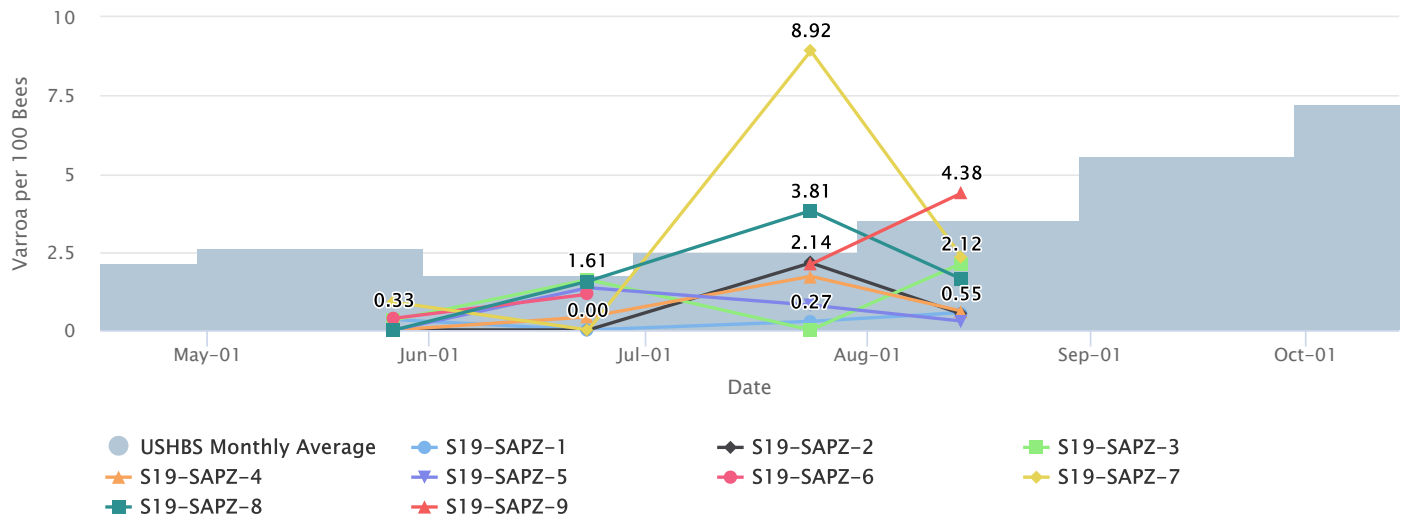
- Data presented: average ± 95% Confidence Interval (# of samples)
- The ± 95% Confidence Interval represents the range of expected values for 95% of the data. Observations outside this range may have occurred, but we consider those outliers and not representative of the majority of the data.
- Tier 4 Average, Last Year includes Tier 4 data starting in June 2013.
- APHIS Honey Bee Disease Survey is a national effort sponsored by USDA Animal and Plant Health Inspection Service (APHIS) in collaboration with the Agricultural Research Service (ARS) and University of Maryland (UMD). To date, the data provided for the APHIS monthly average is a composite of data from 2009 - Present.
- We consider => one million spores per bee (highlighted in red) to be the acceptable threshold in a hive. Your nosema levels will fluctuate with temperature and colonies' sun exposure every month.

Average Varroa per 100 Bees in 2019 for Your Samples Compared to the National Average



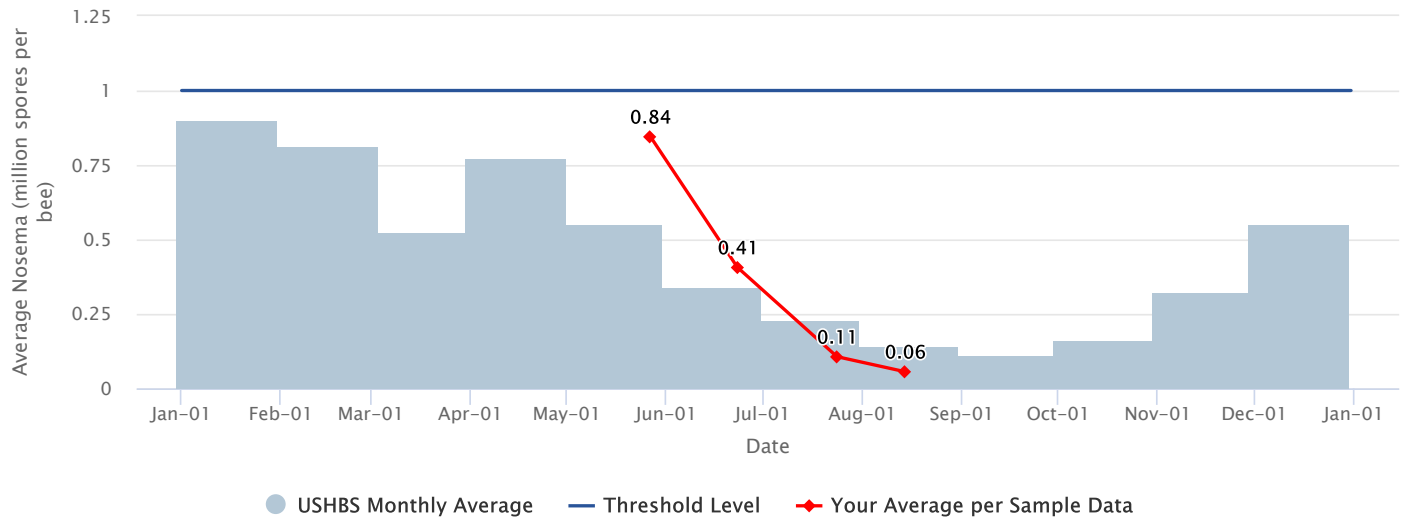
Highcharts.com

Varroa per 100 Bees per Colony in 2019 for Your Samples Compared to the National Average



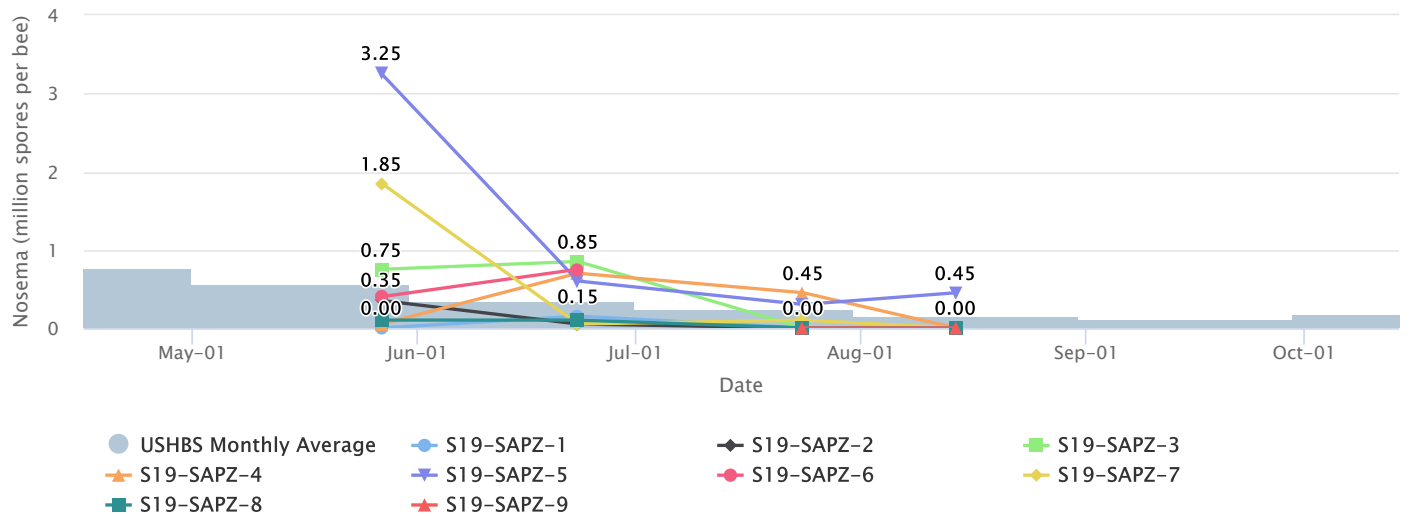
Highcharts.com

Average Nosema in Million Spores per Bee in 2019 for Your Samples Compared to the National Average



Highcharts.com

Nosema in Million Spores per Bee per Colony in 2019 for Your Samples Compared to the National Average



Highcharts.com

All Samples for year									
Hive	Sampling Date	Queen Status	Brood Pattern	Frames of Adults	Particular Observation	Recent Management	# Bees in Sample	# Mites / 100 Bees	Millions of Spores per Bee
S19-SAPZ-1	May 27, 2019	QS	4.0	5.0	we marked the queen, queen (virgin) was installed 4.22.19, laying nice	movement management	302	0.3	0.00
S19-SAPZ-2	May 27, 2019	QR	3.0	10.0	marked the queen	movement management	235	0.0	0.35
S19-SAPZ-3	May 27, 2019	QR	4.0	7.0	donated hive, split with an old queen, gentle	movement management	309	0.3	0.75
S19-SAPZ-4	May 27, 2019	QR	4.0	9.0	drawing frames nice, needs a super	management	283	0.0	0.05
S19-SAPZ-5	May 27, 2019	QS	4.0	4.5	painted queen today, requeened 5.11.19	requeen movement management	215	0.0	3.25
S19-SAPZ-6	May 27, 2019	QL	0.0	24.0	lost queen somehow, giving a frame of eggs to raise a queen	movement management	267	0.4	0.40
S19-SAPZ-7	May 27, 2019	QR	4.0	24.0	brood chamber has a lot of honey, just given a super 1 week ago	movement management	225	0.9	1.85
S19-SAPZ-8	May 27, 2019	QR	4.0	30.0	packed with honey, needs super, gentle	movement management	227	0.0	0.10
S19-SAPZ-1	June 23, 2019	QR	4.0	25.0	flow has stopped, treated with OX pad	treatment management	335	0.0	0.15
S19-SAPZ-2	June 23, 2019	QR	0.0	20.0	only saw eggs, bee runny	management	261	0.0	0.05
S19-SAPZ-3	June 23, 2019	QNS	0.0	35.0	hive a lot of bees yet no capped brood, 2nd full deep honey	management	310	1.6	0.85
S19-SAPZ-4	June 23, 2019	QNS	0.0	29.0	hive a lot of bees, no capped brood	management	239	0.4	0.70
S19-SAPZ-5	June 23, 2019	QNS	0.0	36.0	no capped brood, 2 M of honey, 2nd filled with honey	management	296	1.4	0.60
S19-SAPZ-6	June 23, 2019	QNS	0.0	11.0	no capped brood, 2M of honey, going down hill	management	262	1.1	0.75
S19-SAPZ-7	June 23, 2019	QS	3.0	31.0	doing fine	management	307	0.0	0.05
S19-SAPZ-8	June 23, 2019	QR	5.0	45.0	brood on 2 1/2 box, v strong, added 1 M	management	320	1.6	0.10
S19-SAPZ-1	July 24, 2019	QR	2.5	36.0	Need honey removed. 3 med of honey	management	364	0.3	0.00

All Samples for year									
Hive	Sampling Date	Queen Status	Brood Pattern	Frames of Adults	Particular Observation	Recent Management	# Bees in Sample	# Mites / 100 Bees	Millions of Spores per Bee
S19-SAPZ-2	July 24, 2019	QR	5.0	25.0	Great brood. 1.5 med of honey	management	373	2.1	0.00
S19-SAPZ-3	July 24, 2019	QR	5.0	35.0	Great brood. 4-super of honey	management	392	0.0	0.00
S19-SAPZ-4	July 24, 2019	VQ	0.0	34.0	Gave virgin Q not sure. It took wait 1 more week.	requeen management	291	1.7	0.45
S19-SAPZ-5	July 24, 2019		0.0	24.0	Added VQ but not sure it took.	management	377	0.8	0.30
S19-SAPZ-7	July 24, 2019	QR	4.5	35.0	3rd deep full of honey. Brood great shall-med both full of honey.	management	381	8.9	0.10
S19-SAPZ-8	July 24, 2019	QR	5.0	46.0	Great hive 5-supers of capped honey great brood.	management	367	3.8	0.00
S19-SAPZ-9	July 24, 2019	QR	4.5	11.0	Swarm I caught in late May	management	381	2.1	0.00
S19-SAPZ-1	Aug. 14, 2019	QNS	0.0	24.0	No brood seen some chewed Q-cells bees v-calm	treatment management	360	0.6	0.00
S19-SAPZ-2	Aug. 14, 2019	QR	3.0	26.0	No flow Q laying less	treatment management	388	0.5	0.00
S19-SAPZ-3	Aug. 14, 2019	QR	5.0	40.0	Great brood all stages. Brood good hive	treatment management	376	2.1	0.00
S19-SAPZ-4	Aug. 14, 2019	QL	0.0	18.0	Added laying Q from late swarm in cage	requeen treatment management	330	0.6	0.00
S19-SAPZ-5	Aug. 14, 2019	QL	5.0	26.0	Lost Q gave a NUC & Q. Hive filled with honey	requeen treatment management	352	0.3	0.45
S19-SAPZ-7	Aug. 14, 2019	QR	4.0	35.0	Hive on scale eating a lot of honey. Great brood yet.	treatment management	341	2.3	0.00
S19-SAPZ-8	Aug. 14, 2019	QR	5.0	46.0	Great brood. 5 -supers capped honey	treatment management	368	1.6	0.00
S19-SAPZ-9	Aug. 14, 2019	QR	3.0	27.0	Nice bees	treatment management	320	4.4	0.00

- Hive # highlighted in blue indicates hive scale installed. Yellow indicates pollen trap installed.