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Bee Informed Partnership Sentinel Apiary Report

Beekeeper: Year: 2019
Sample Kit Code: SAOG

Report date: 10/12/20

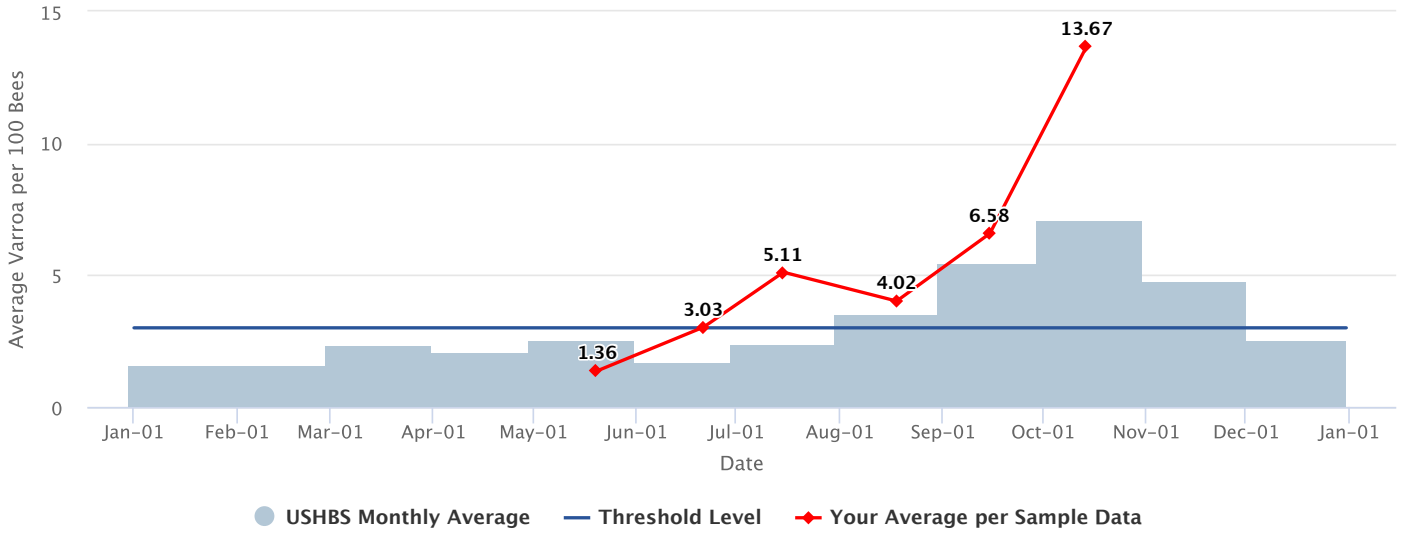
Varroa (mites per 100 bees)						
Hive	May	June	July	August	September	October
S19-SAOG-1	0.0	15.0	11.4	3.6	7.1	5.4
S19-SAOG-2	2.7	0.5	3.1	3.2	18.6	33.0
S19-SAOG-3	0.5	0.3	2.8	5.1	9.4	28.1
S19-SAOG-4	0.3	2.3	9.0	7.9	2.9	4.3
S19-SAOG-5	1.9	1.6	1.6	1.9	1.0	6.6
S19-SAOG-6	0.9	1.0	5.3	6.6	7.2	16.8
S19-SAOG-7	4.0	2.1	0.6	1.7	1.9	7.5
S19-SAOG-8	0.6	1.4	7.1	2.1	4.6	7.7
Your Monthly Average	1.36 ±1.16 (8)	3.03 ±4.07 (8)	5.11 ±3.18 (8)	4.02 ±1.92 (8)	6.58 ±4.73 (8)	13.67 ±9.32 (8)
USHBS Average	2.53 ±0.26 (599)	1.7 ±0.13 (1144)	2.41 ±0.2 (932)	3.49 ±0.21 (1197)	5.49 ±0.34 (1259)	7.12 ±0.44 (1036)
Sentinel Average	1.04 ±0.23 (379)	1.45 ±0.26 (389)	2.82 ±0.5 (398)	3.35 ±0.57 (380)	5.95 ±1.07 (344)	6.67 ±1.09 (317)
Sentinel 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.
- Sentinel Average, Last Year includes Sentinel 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-SAOG-1	0.0	0.0	0.0	0.0	0.0	0.0
S19-SAOG-2	0.0	0.1	0.1	0.0	0.0	0.0
S19-SAOG-3	0.0	0.0	0.0	0.0	0.0	0.0
S19-SAOG-4	0.0	0.0	0.0	0.0	0.0	0.0
S19-SAOG-5	0.1	0.0	0.1	0.0	0.0	0.0
S19-SAOG-6	0.0	0.0	0.1	0.0	0.0	0.0
S19-SAOG-7	0.0	0.0	0.0	0.0	0.0	0.0
S19-SAOG-8	0.1	0.0	0.0	0.0	0.0	0.0
Your Monthly Average	0.03 ±0.04 (8)	0.01 ±0.03 (8)	0.03 ±0.03 (8)	0.0 ±0.0 (8)	0.0 ±0.0 (8)	0.0 ±0.0 (8)
USHBS Average	2.53 ±0.26 (599)	1.7 ±0.13 (1144)	2.41 ±0.2 (932)	3.49 ±0.21 (1197)	5.49 ±0.34 (1259)	7.12 ±0.44 (1036)
Sentinel Average	1.21 ±0.23 (379)	0.45 ±0.11 (389)	0.19 ±0.05 (398)	0.23 ±0.1 (380)	0.18 ±0.07 (340)	0.18 ±0.07 (317)
Sentinel 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)

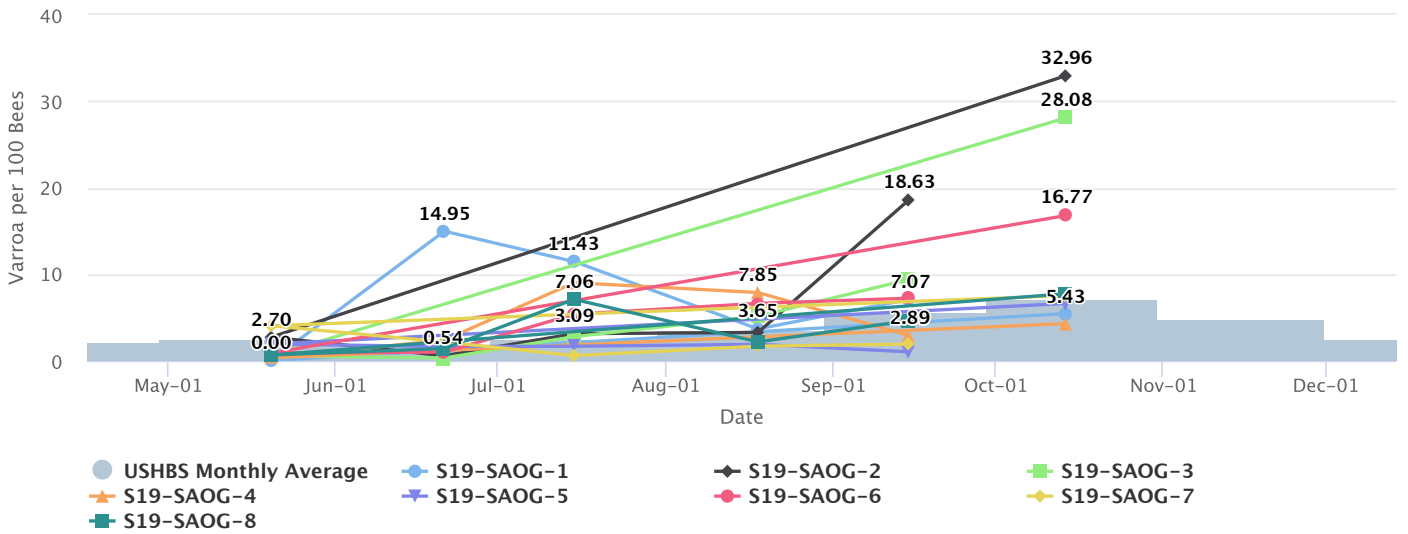
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- We consider => one million spores per bee (highlighted in red) to be the acceptable threshold in a hive. Your nosema levels will fluctuate with temperature and colonies' sun exposure every month.

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



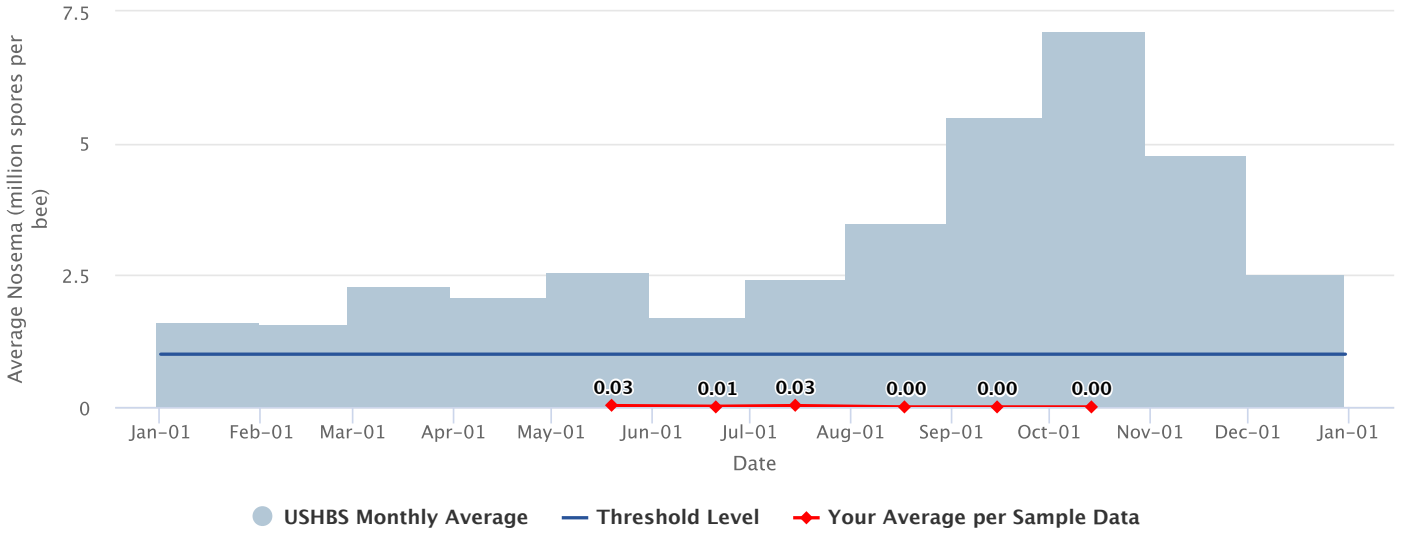
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Varroa per 100 Bees per Colony in 2019 for Your Samples Compared to the National Average



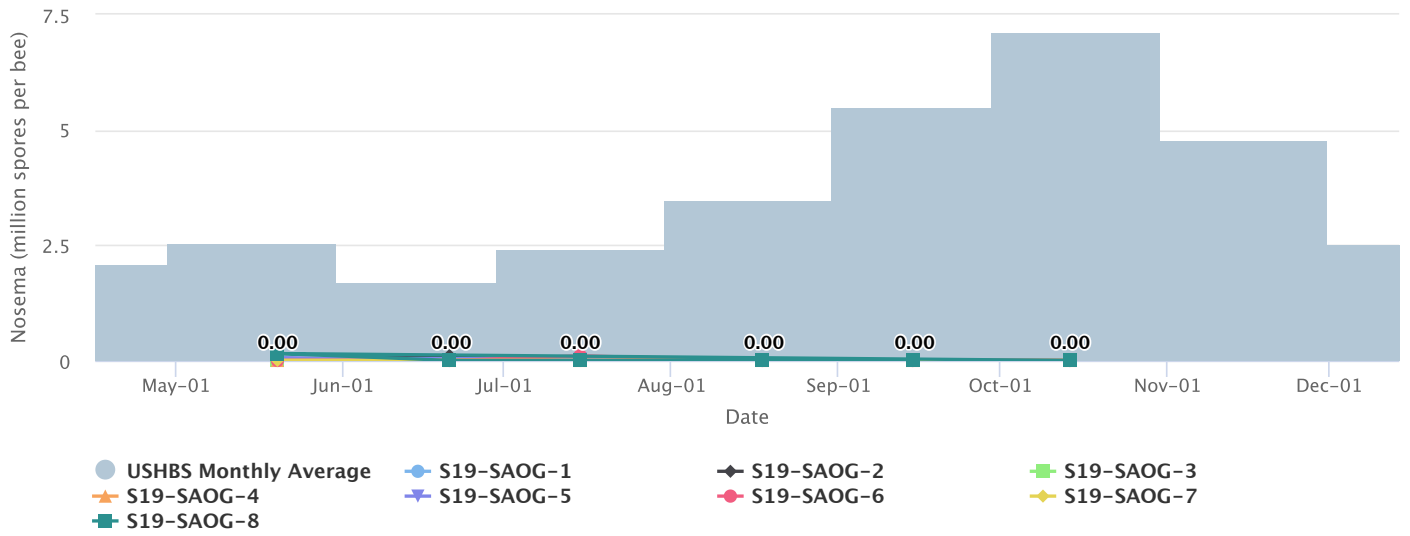
Highcharts.com

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



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



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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-SAOG-1	May 20, 2019	QR	3.0		no signs of sick larvae, just a bad pattern		317	0.0	0.00
S19-SAOG-2	May 20, 2019	VQ	4.0		swarmed 2 weeks ago		296	2.7	0.00
S19-SAOG-3	May 20, 2019	QR	4.0		overwintered queen, shook swarm 4/19		384	0.5	0.00
S19-SAOG-4	May 20, 2019	QR	5.0				331	0.3	0.00
S19-SAOG-5	May 20, 2019	QR	5.0				315	1.9	0.05
S19-SAOG-6	May 20, 2019	QR	5.0				350	0.9	0.00
S19-SAOG-7	May 20, 2019	QS			queen has been laying less than 3 days		299	4.0	0.00
S19-SAOG-8	May 20, 2019	QR	5.0				319	0.6	0.15
S19-SAOG-1	June 21, 2019	QR	4.0	50.0	a little chewed down brood		267	15.0	0.00
S19-SAOG-2	June 21, 2019	QR	4.0	17.0			369	0.5	0.10
S19-SAOG-3	June 21, 2019	QS	4.0	8.0	crazy crowded		355	0.3	0.00
S19-SAOG-4	June 21, 2019	QR	4.0	7.0			383	2.3	0.00
S19-SAOG-5	June 21, 2019	QR	4.0	7.0			373	1.6	0.00
S19-SAOG-6	June 21, 2019	QR	4.0	7.0			414	1.0	0.00
S19-SAOG-7	June 21, 2019	QR	4.0	9.0			375	2.1	0.00
S19-SAOG-8	June 21, 2019	QR	5.0	16.0			435	1.4	0.00
S19-SAOG-1	July 15, 2019	QR	4.0	50.0	chewed down brood		297	11.4	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-SAOG-2	July 15, 2019	QR	5.0	19.0			355	3.1	0.05
S19-SAOG-3	July 15, 2019	QR	5.0	6.5			327	2.8	0.00
S19-SAOG-4	July 15, 2019	QR	5.0	6.5			378	9.0	0.00
S19-SAOG-5	July 15, 2019	QR	5.0	6.5			365	1.6	0.05
S19-SAOG-6	July 15, 2019	QR	5.0	6.5			374	5.3	0.10
S19-SAOG-7	July 15, 2019	QR	4.0	11.0			357	0.6	0.00
S19-SAOG-8	July 15, 2019	QR	5.0	13.0	some bald brood or uncapped purple eye pupae		410	7.1	0.00
S19-SAOG-1	Aug. 18, 2019	QR	5.0	50.0	Robbed 5 supers 8/18	management	329	3.6	0.00
S19-SAOG-2	Aug. 18, 2019	QR	5.0	13.0	Robbed 1 super 8/18	management	308	3.2	0.00
S19-SAOG-3	Aug. 18, 2019	QR	5.0	7.0			371	5.1	0.00
S19-SAOG-4	Aug. 18, 2019	QR	3.0	7.0	EFB		331	7.9	0.00
S19-SAOG-5	Aug. 18, 2019	QR	4.0	7.0	Some chewed down brood		428	1.9	0.00
S19-SAOG-6	Aug. 18, 2019	QR	3.0	7.0	Some bald brood		378	6.6	0.00
S19-SAOG-7	Aug. 18, 2019	QS	4.0	11.0			303	1.7	0.00
S19-SAOG-8	Aug. 18, 2019	QR	5.0	13.0			418	2.1	0.00
S19-SAOG-1	Sept. 15, 2019	QR	4.0	20.0			339	7.1	0.00
S19-SAOG-2	Sept. 15, 2019	QR	4.0	14.0	some bald brood		407	18.6	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-SAOG-3	Sept. 15, 2019	QR	4.0	7.0	honey bound		405	9.4	0.00
S19-SAOG-4	Sept. 15, 2019	QR	4.0	7.0			311	2.9	0.00
S19-SAOG-5	Sept. 15, 2019	QR	5.0	7.0			303	1.0	0.00
S19-SAOG-6	Sept. 15, 2019	QR	4.0	7.0			402	7.2	0.00
S19-SAOG-7	Sept. 15, 2019	QR	4.0	14.0			370	1.9	0.00
S19-SAOG-8	Sept. 15, 2019	QR	5.0	14.0	a little bald brood		390	4.6	0.00
S19-SAOG-1	Oct. 14, 2019	QR	4.0	16.0	Just a little bald brood		368	5.4	0.00
S19-SAOG-2	Oct. 14, 2019	QS	3.0	11.0	Some chewed down brood, K wing, sacbrood		279	33.0	0.00
S19-SAOG-3	Oct. 14, 2019	QS	3.0	7.0	Some chewed down brood		356	28.1	0.00
S19-SAOG-4	Oct. 14, 2019	QR	4.0	5.0	Some bald brood		328	4.3	0.00
S19-SAOG-5	Oct. 14, 2019	QS	5.0	7.0			348	6.6	0.00
S19-SAOG-6	Oct. 14, 2019	QS	3.0	7.0			363	16.8	0.00
S19-SAOG-7	Oct. 14, 2019	QR	4.0	13.0			359	7.5	0.00
S19-SAOG-8	Oct. 14, 2019	QR	4.0	13.0			401	7.7	0.00

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