Tables	Comments								
apiary									
beekeeper									
colony									
disorder									
treatments									
food									
hives									
hive components									
hive types									
inspections									
queen									
test									
to do									
weather									
varroa									
Note: fields with superscripts indicate that the field is not common to all four databases, but is found in one, two, or three. If no superscript is present, the field is found in all four databases analyzed.									
Superscript key: 1 = HiveTracks, 2 = BEEP, 3 = HealthyColonyChecklist									

Apiary

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Apiary ID	Apiary identification number	int	11	Y	-	auto-increment
Beekeeper ID	Beekeeper's identification numebr	int	11	Y	-	
Latitude	Latitude of apiary	numeric	8,5	Y	-	
Longitude	Longitude of apiary	numeric	9,5	Y	-	
Name	Name of the apiary given by the beekeeper	varchar	256	N	NULL	
Photo	Contains a photo of the apiary	image	-	N	NULL	
Address	Contains the address of apiary	varchar	2048	N	NULL	
Country	Country where the apiary is located	varchar	256	N	NULL	
Number of hives	Count of number of hives in the apiary	numeric	3,0	N	0	
Active[2]	Boolean field for if the apiary is active	boolean	-	N	0	
Environment[1]	Environment of the apiary	numeric	1,0	N	0	0 = other, 1 = natural, 2 = agricultural, 3 = urban
Last visited[1]	Date the apiary was last visited	datetime	-	N	-	
Time Zone[1]	Time zone of the apiary	varchar	50	N	NULL	
Start date[1]	Date the apiary was created	datetime	-	N	-	
Orientation[2]	Orientation of apiary	numeric	2,0	N	8	0 = east, 1 = north, 2 = northwest, 3 = northeast, 4 = south, 5 = southwest, 6 = southeast, 7 = west, 8 = various
Type[2]	Type of apiary	numeric	1,0	N	3	0 = client, 1 = fixed, 2 = moveable, 3 = other, 4 = temporary
Notes		varchar	1025	N	NULL	Contains other values beekeepers want to include about their apiary. ex) landmarks nearby, directions to finding apiary, etc.

Link to main

Beekeeper

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Beekeeper ID	Beekeeper identification number used to link a beekeeper with hives/apiaries/etc in database.	int	11	Y	-	Auto-increment
Email	Beekeeper's email address	varchar	255	Y	-	
First Name	Beekeeper's first name	varchar	255	Y	-	
Last Name	Beekeeper's last name	varchar	255	Y	-	
Phone Number	Beekeeper phone number	varchar	255	Y	-	
Photo	Photo of beekeeper	image	-	N	NULL	
Beekeeper Since[1][2]	Year the beekeeper started beekeeping	datetime	-	Y	-	
Company Location[2]	Location of the beekeeper's company (if applicable)	varchar	2048	N	NULL	
Role[2]	Role of beekeeper	numeric	1,0	Y	-	0 = student, 1 = teacher, 2 = other
Birthdate[2]	Date of birth of beekeeper	datetime	-	Y	-	
Gender[2]	Gender of beekeeper	numeric	1,0	Y	-	0 = Prefer not to say, 1 = female, 2 = male
Method[2]	Beekeeper uses biodynamic method of beekeeping	numeric	1,0	Y	-	0 = biodynamic, 1 = commercial, 2 = conventional, 3 = natural, 4 = organic, 5 = other
Notes		varchar	1025	N	NULL	Contains other values beekeepers want to include
Link to main						

							Colony	
Attriute	**Definition**	**Data Type**	**Size and Decimalization**	**Required**	**Default Value**	**Comments**
Hive ID	Hive identification number to which this colony belongs	int	11	Y	-	
Bee source[1][2]	Source of colony	numeric	1,0	N	0	0 = unknown, 1 = acquired/bought, 2 = nucleus, 3 = package, 4 = split, 5 = superceded, 6 = swarm
Species[2]	Honey bee species that makes up this colony	numeric	2,0	N	0	0 = unknown, 1 = other, 2 = Koschevnikovi, 3 = Italian, 4 = European dark, 5 = Caucasian, 6 = Carniolan, 7 = Buckfast, 8 = Asiatic, 9 = Africanized (hybrid), 10 = African
Notes	Additional notes on colony	varchar	1024	N	NULL	
Link to main						

Disorder

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Hive ID	Hive identification number	int	11	Y	-	
Inspection ID	Inspection ID number	int	11	Y	-	
Severity	Severity level of disorder			N		
Starvation	Occurs when the colony runs out of food and water	boolean	-	N	FALSE	
Spotty brood	Spotty brood pattern can occur when some larvae die in their cells from a disease, while others survive and become capped resulting in a spotty or shotgun appearance of the capped stage of brood.	boolean	-	N	FALSE	
Robbing	Term used to describe honey bees that are invading another hive and stealing the stored honey. They typically fight resident bees and many can die in the process	boolean	-	N	FALSE	
Queenlessness and laying workers	Laying workers occurs when a hive is queenless, and worker bees begin to lay eggs	boolean	-	N	FALSE	
Pesticide losses	Pesticide drift (farm in close proximity that uses pesticides and can kill bees)	boolean	-	N	FALSE	
Colony collapse disorder	Phenomenon that occurs when the majority of the worker bees in a colony disappear and leave behind a queen, plenty of food and a few nurse bees to care for the remaining immature bees and the queen	boolean	-	N	FALSE	
Varroa mites	Varroa mites are a microscopic mite which is a debilitating parasite of the honeybee, causing loss of honey production	boolean	-	N	FALSE	
Small hive beetles	Can eat pollen, brood, honey, dead adult bees, and combs, causing honey to ferment in the process	boolean	-	N	FALSE	
Mice	Mice can infest beehives, where they typically eat pollen from the pollen band and leave combs weak	boolean	-	N	FALSE	
Bears	Bears are very attracted to honey and bee brood, and they have the ability to destroy hive boxes and rip frames apart	boolean	-	N	FALSE	
European Foulbrood (EFB)	Disease that affects honey bee larvae before the capped stage. It is characterized by dead and dying larvae which can appear curled upwards, brown or yellow, melted, and/or dried and rubbery.	boolean	-	N	FALSE	

Name	Description	Type	Size	Nullable	Default
American Foulbrood (AFB)	AFB is a brood disease and symptoms include: irregular and patchy brood pattern; cell cappings on affected brood may appear sunken, darker colored, or greasy; the larvae die after capping and become a light to dark brown semi-liquid mass; and infected hives may have a sulphurous smell due to decomposing brood.	boolean	-	N	FALSE
Chalkbrood	Chalkbrood contaminates larvae when the spores are mixed with the brood food	boolean	-	N	FALSE
Deformed wing virus	Disease often associated with high varroa mite levels and can affect all stages of honey bee development. Symptoms are exclusive to the adult honey bee and include: twisted, shriveled wings, bloated abdomens, decreased body size and discoloration.	boolean	-	N	FALSE
Mold[2]		boolean	-	N	FALSE
Tropilaelaps mites[2]		boolean	-	N	FALSE
European hornets[2]		boolean	-	N	FALSE
Asian Hornets[2]		boolean	-	N	FALSE
Vertebrates[2]		boolean	-	N	FALSE
Amphibians[2]		boolean	-	N	FALSE
Badgers[2]		boolean	-	N	FALSE
Amoeba disease[2]		boolean	-	N	FALSE
Stonebrood[2]		boolean	-	N	FALSE
Nosema Ceranae[2]		boolean	-	N	FALSE
Nosema Apis[2]		boolean	-	N	FALSE
Cloudy wing virus[2]		boolean	-	N	FALSE
Lake Sinai virus[2]		boolean	-	N	FALSE
Kashmir bee virus[2]		boolean	-	N	FALSE
Israeli acute paralysis virus[2]		boolean	-	N	FALSE
Black queen cell virus[2]		boolean	-	N	FALSE
Acute bee paralysis virus[2]		boolean	-	N	FALSE
Kakugo virus[2]		boolean	-	N	FALSE
Invertebrate iridescent virus type 6[2]		boolean	-	N	FALSE
Tobacco ringspot virus[2]		boolean	-	N	FALSE
Other[1]	Open-ended field where users can enter in a disease that isn't present in this list.	varchar	1024	N	NULL

Note: BEEP refers to all these conditions as disorders, HCC refers to them as stressors, and HT refers to them as diseases

Link to main

Food

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Hive ID	Hive identification number to which these components belong	int	11	Y	-	
Note	Open field for beekeeper to add notes about food	varchar	1024	N	NULL	
Honey stores	Amount of honey stored in hive	numeric	1,0	Y	-	0 = average, 1 = low, 2 = high
Pollen stores	Amount of pollen stored in hive	numeric	1,0	Y	-	0 = average, 1 = low, 2 = high
Nectar stores	Amount of nectar stored in hive	numeric	1,0	Y	-	0 = average, 1 = low, 2 = high
Forage	There is a good forage environment for the hive	boolean	-	Y	-	
Forage Source	Lists the main source of forage for this hive	varchar	1024	Y	-	Feel like this is important in the case that something happens to the hive's main forage source?
Water	Boolean field to determine if water is available to the hive at time of inspection	boolean	-	Y	-	
Feedings	Additional feed given to hive after inspection	varchar	1024	N	NULL	If field is null, there is no additional feed given to the hive
Feed Amount	Amount of feed given to the hive	numeric		N	0	What units should be used for this? Volume?
Link to main						

	Hives						
Attribute	**Definition**	**Data Type**	**Size and Decimalization**	**Required**	**Default Value**	**Comments**
Hive ID	Hive ID used to link to other tables in database and identify a specific hive	int	11	Y	-	
Apiary ID	Apiary ID/name used to identify which apiary each hive belongs to	int	11	Y	-	
Photo[23]	Photo of hive	image	-	N	NULL	
Frame count		numeric	1,0	Y	-	
Hive type	Type of hive					
Hive components/configuration	Components of beehive					Links to hive components table
Notes	Additional notes about hive	varchar	1024	N	NULL	
Link to main						

Hive Types

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Hive ID	Hive ID used to link these hive types to the hive which they belong to	int	11	Y	-	
8 frame[1]		boolean	-	N	FALSE	
Langstroth[12]		boolean	-	N	FALSE	
Top bar[12]		boolean	-	N	FALSE	
Nucleus Colony[12]		boolean	-	N	FALSE	
Test[2]		boolean	-	N	FALSE	
Apidea[2]		boolean	-	N	FALSE	
Miniplus[2]		boolean	-	N	FALSE	
Beehaus[2]		boolean	-	N	FALSE	
BS Improved National[2]		boolean	-	N	FALSE	
Charles Nash Abbott[2]		boolean	-	N	FALSE	
Commerical[2]		boolean	-	N	FALSE	
Custom[2]		boolean	-	N	FALSE	
Dadant[2]		boolean	-	N	FALSE	
Dartington Long deep[2]		boolean	-	N	FALSE	
Decoy hive[2]		boolean	-	N	FALSE	
Deutsch-NormalmaB[2]		boolean	-	N	FALSE	
Einraumbeute[2]		boolean	-	N	FALSE	
Golzbeute[2]		boolean	-	N	FALSE	
Kempisch[2]		boolean	-	N	FALSE	
Long Box[2]		boolean	-	N	FALSE	
Observation hive[2]		boolean	-	N	FALSE	
Perone[2]		boolean	-	N	FALSE	
Segeberger[2]		boolean	-	N	FALSE	
Simplex[2]		boolean	-	N	FALSE	
Spaarkast[2]		boolean	-	N	FALSE	
Three frames[2]		boolean	-	N	FALSE	
Warre[2]		boolean	-	N	FALSE	
William Broughton Carr[2]		boolean	-	N	FALSE	
Zander[2]		boolean	-	N	FALSE	
Other	Other hive types not included in this list	varchar	1024	N	NULL	

Link to hives						
Link to main						

			Hive Components[12]			
Attribute	**Definition**	**Data Type**	**Size and Decimalization**	**Required**	**Default Value**	**Comments**
Hive ID	Hive identification number to which these components belong	int	11	Y	-	
Queen Excluder	Selective barrier inside the hive that allows worker bees but not the larger queens and drones to traverse the barrier	boolean	-	N	FALSE	
Honey super	Collect surplus honey	boolean	-	N	FALSE	
Bee escape	Device used when beekeeper is getting ready to remove honey supers. Provide one way passages so that once bees leave the super, they can't find their way back in.	boolean	-	N	FALSE	
Entrance feeder	Equipment so beekeepers can provide additional resources to their bees. Sits at the entrance to the beehive	boolean	-	N	FALSE	
Entrance reducer	Limits bee access to the hive and controls ventilation and temperature during cooler months	boolean	-	N	FALSE	
Bottom board	Floor of the beehive	boolean	-	N	FALSE	
Deep (1)	Standard hive body	boolean	-	N	FALSE	
Flow[1]	Brand name standard hive body (google Flow hive) that has special characteristis for honey extraction. Only used for honey production	boolean	-	N	FALSE	
Garden top[1]	Copper or other metal pitched top	boolean	-	N	FALSE	
Telescoping top[1]	Aluminum covered top	boolean	-	N	FALSE	
Migrating top[1]	Specialized top for shipping hives	boolean	-	N	FALSE	
Moisture quilt[1]	A low profile box intended to hold moisture absorbing material such as wood chips	boolean	-	N	FALSE	
Inner cover[1]	Extra ventilation source, positioned to the front of the hive.	boolean	-	N	FALSE	
Shim[1]	Shim that alows extra space for patties, feeding, or medications	boolean	-	N	FALSE	
Vent Box[1]	Box that allows greater air flow through the hive	boolean	-	N	FALSE	
Screened inner cover[1]	Allows for more ventilation	boolean	-	N	FALSE	

Double screen board[1]	Overwinter a weak colony by using this to pass heat up from a strong colony	boolean	-	N	FALSE	
Slatted rack[1]	Wooden slated rack for ventilation	boolean	-	N	FALSE	
Interior pollen trap[1]	Interior pollen trap with pull out drawer	boolean	-	N	FALSE	
Candy board[1]	A candy board for feeding your bees	boolean	-	N	FALSE	
Hive top feeder[1]	Sit on top of the upper box, aligned with a hole in the inner cover.	boolean	-	N	FALSE	
Shallow super[1]		boolean	-	N	FALSE	
Medium super[1]	Medium hive body	boolean	-	N	FALSE	
Moving and robbing screen[1]	Fully blocks hive entrance for moving or to prevent robbing	boolean	-	N	FALSE	
Entrance pollen trap[1]	Pollen trap placed at the entrance to the hive	boolean	-	N	FALSE	
Mouse guard[1]	Metal plate which has holes big enough for bees, but too small for rodents.	boolean	-	N	FALSE	
Screened bottom board[1]	Integrated pest management with screened bottom. Allows for greater ventilation and Varroa control	boolean	-	N	FALSE	
Beetle trap[1]	Holds small hive beetles	boolean	-	N	FALSE	
Hive Stand[1]	Hive stand with landing board	boolean	-	N	FALSE	
Cinder Blocks[1]	An alternative to a wooden stand	boolean	-	N	FALSE	
Hive scale[1]	A scale to weigh the hive	boolean	-	N	FALSE	
Block frame[2]		boolean	-	N	FALSE	
Brood chamber[2]	Typically located in the bottom boxed of a hive, and house worker-made cells where the eggs, larvae, and pupae develop. Some of the cells in this part of the hive also hold pollen, nectar, or honey that's used to feed the developing larvae.	boolean	-	N	FALSE	
Brood frame[2]	Frame which is mainly occupied by brood	boolean	-	N	FALSE	
Honey frame[2]	A structural element in a beehive that holds the honeycomb or brood comb within the hive enclosure or box	boolean	-	N	FALSE	
Nectar frame[2]	Frame that contains nectar	boolean	-	N	FALSE	
Pollen frame[2]	Frame that contains pollen	boolean	-	N	FALSE	

Varroa drawer[2]	Mesh floor that traps varroa mites as they fall off the bees when they enter the hive	boolean	-	N	FALSE	
Other	Other hive components not listed here	varchar	1024	N	NULL	
Notes	Notes on hive components	varchar	1024	N	NULL	
Link to main						

Inspections

Attriute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Inspection ID	Identification number of inspection	int	11	Y	-	
Beekeeper ID	Identification number of beekeeper conducting the inspection	int	11	Y	-	
Hive ID	Hive identification number to which this inspection is being conducted	int	11	Y	-	
Date	Date inspection was conducted	datetime	-	Y	-	Could be used to find weather data
Time	Time inspection was conducted	datetime	-	Y	-	Can be automatically calculated or can be entered in manually by user if just written down in the field
Weather	Weather at hive at time of inspection					Links to weather table
Temperment	Bee temperament (defensive/gentle/agitated)	numeric	1,0	Y	0	0 = calm, 1 = agitated, 2 = defensive
Odor	Open ended field for beekeeper to enter in any odor detected upon inspection.	varchar	256	N	NULL	
Diseases/problems	Diseases found in hive upon inspection					Links to disorders table
Disease Resistance	Field used to identify any disease resistance measures being utilized	varchar	1024	N	NULL	
Treatments	Links to treatment table with in depth descriptions of treatments					
Queen	Boolean field to indicate presence of a queen	boolean	-	Y	FALSE	
Food	Links to food table which has a more in depth analysis of food stores					Links to food table
Health	Health of colony stored as a percentage (100% is very strong, 0% is dead/dying)	numeric	2,0	Y	-	Not sure how to represent this field as a data type? Would want it to be calculated automatically?
Weight	Weight of hive at time of inspection	numeric		N	0	

Pupae[23]	Count of pupae in the colony (low, normal, high) on date of inspection	numeric	1,0	N	1	0 = low, 1 = normal, 2 = high
Larvae[23]	Count of larvae in the colony (low, normal, high) on date of inspection	numeric	1,0	N	1	0 = low, 1 = normal, 2 = high
Eggs[23]	Count of eggs in the colony (low, normal, high) on date of inspection	numeric	1,0	N	1	0 = low, 1 = normal, 2 = high
Drones[23]	Count of drones in the colony (low, normal, high) on date of inspection	numeric	1,0	N	1	0 = low, 1 = normal, 2 = high
Adult Bees[23]	Count of adult bees in the colony (low, normal, high) on date of inspection	numeric	1,0	N	1	0 = low, 1 = normal, 2 = high
Space status	Status of space in the hive at inspection	numeric	1,0	N	1	0 = too little, 1 = normal, too much
Notes	Extra notes about inspection that beekeepers want to include	varchar	1024	N	NULL	
Link to main						

Queen

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Queen ID	Queen identification number	int	11	Y	-	
Hive ID	Linked with hives table	int	11	Y	-	
Presence	Boolean value for if there is a queen present within the hive	boolean	-	Y	-	
Marked	Boolean value for if the queen is marked or not	boolean	-	N	FALSE	
Mark Color	Color that the queen is marked with	numeric	1,0	N	0	0 = not marked, 1 = white, 2 = yellow, 3 = red, 4 = green, 5 = blue
Photo	Photo of the queen	image	-	N	NULL	
Introduced date	Date the queen was introduced to the colony	datetime	-	N	NULL	
Clipped	Booean field to indicate whether the queen's wings are clipped or not	boolean	-	Y	-	
Species²	Species of Queen bee	numeric	2,0	N	0	0 = unknown, 1 = other, 2 = Koschevnikovi, 3 = Italian, 4 = European dark, 5 = Caucasian, 6 = Carniolan, 7 = Buckfast, 8 = Asiatic, 9 = Africanized (hybrid), 10 = African
Notes	Notes on the Queen bee	varchar	1024	N	NULL	
Link to main						

Experimental Tests

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Hive ID	Hive identification number on which the test is being conducted	int	11	Y	-	
Test Name	Experimental test name	varchar	1024	Y	-	
Description	Description of experiment	varchar	1024	N	NULL	
Start Date	Date the test began	datetime	-	Y	-	
Finish Date	Date the test ended	datetime	-	Y	-	
Measurements	What the experiment is measuring	varchar	1024	N	NULL	
Units	Measurement units	varchar	1024	N	NULL	
Tools	Tools used by beekeeper to conduct the experiment	varchar	1024	N	NULL	
Results	Results from experimental test	varchar	1024	Y	-	
Laboratory test[23]	Indicates whether this test was conducted in a laboratory or not	boolean	-	Y	-	
Laboratory test location	If the test was conducted in a laboratory, this field lists the laboratory's location	varchar	1024	N	NULL	
Notes	Additional notes about test made by beekeeper	varchar	1024	N	NULL	
Link to main						

To Do's

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Hive ID	Hive identification number	int	11	Y	-	
Create date	Date the task was created	datetime	-	Y	-	
Start date	Date the task was started	datetime	-	Y	-	
Completed date	Date the task was completed	datetime	-	Y	-	
Is complete	Boolean field indicating whether a task has been completed	boolean	-	Y	FALSE	
Title	Title of task	varchar	1024	Y	-	
Description	Description of task	varchar	1024	Y	-	
Priority	Priority of this task relative to others on the to do list	numeric	2,0	Y	-	
Notes	Additional notes on task	varchar	1024	N	NULL	
Link to main						

Treatments

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Hive ID	Hive identification number to which the treatment is applied	int	11	Y	-	
Start date	Date that treatment began	datetime	-	Y	-	
Amount (volume)	Volume of treatment given	numeric	3,0	N	0	
Volume units	Units of the volume of treatment	numeric	3,1	N	0	0 = liters, 1 = cubic centimeter, 2 = gallon
Amount (weight)	Weight of treatment given	numeric	3,0	N	0	
Weight units	Units of weight of treatment	numeric	3,1	N	0	0 = grams, 1 = kilograms, 2 = ounces, 3 = pounds
End date	Date treatment ended	datetime	-	Y	-	
Photo	Photo of treatment	image	-	N	NULL	
Result	Open ended field where users can enter the result of treatment	varchar	2048	N	NULL	
Acetic Acid[1]		boolean	-	N	FALSE	
Api-Life VAR[1]		boolean	-	N	FALSE	
Apiguard[1]		boolean	-	N	FALSE	
Apistan[1]		boolean	-	N	FALSE	
Apivar[1]		boolean	-	N	FALSE	
Break Brood Cycle[1]		boolean	-	N	FALSE	
Brood Comb Replacement[1]		boolean	-	N	FALSE	
CheckMite+[1]		boolean	-	N	FALSE	
Coumaphos Strips[1]		boolean	-	N	FALSE	
Drone Brood Removal[1]		boolean	-	N	FALSE	
Drone Comb Removal[1]		boolean	-	N	FALSE	
Formic Acid[1]		boolean	-	N	FALSE	
Formic Pro[1]		boolean	-	N	FALSE	
Fumagilin-B[1]		boolean	-	N	FALSE	
Guard Star[1]		boolean	-	N	FALSE	
Hivastan[1]		boolean	-	N	FALSE	
HopGuard[1]		boolean	-	N	FALSE	
MAQS[1]		boolean	-	N	FALSE	
Mite-A-Thol[1]		boolean	-	N	FALSE	
Oxalic Acid[1]		boolean	-	N	FALSE	
Powder Sugar Roll[1]		boolean	-	N	FALSE	

Small Cell Comb[1]		boolean	-	N	FALSE	
Small Hive Beetle Traps[1]		boolean	-	N	FALSE	
Soil Drench[1]		boolean	-	N	FALSE	
Terra-Pro[1]		boolean	-	N	FALSE	
Terramycin[1]		boolean	-	N	FALSE	
Tylan[1]		boolean	-	N	FALSE	
Other	Other treatments not in this list	varchar	1024	N	NULL	
Link to main						

Weather

Attribute	Definition	Data Type	Size and Decimalization	Required	Default Value	Comments
Precipitation/Rain	Field indicating if it is raining or not at the time of inspection	boolean	-	N	0	
Temperature	Field indicating the temperature outside the hive at the time of inspection	numeric	3,1	N	0	
Temperature Scale	Field indicating the type of scale used to calculate temperature, i.e. Celsius, Fahrenheit, or Kelvin	numeric	3,1	N	0	0= Celsius, 1 = Fahrenheit
Wind	Field indicating the wind speed outside the hive at the time of inspection	numeric	3,1	N	0	
Wind direction	Wind direction at time of inspection	numeric	1,0	N	0	0 = no wind, 1 = east, 2 = north, 3 = northeast, 4 = northwest, 5 = south, 6 = southeast, 7 = southwest, 8 = west
Sun	Sun exposure on the hive	numeric	1,0	N	0	0 = sunny, 1 = partial shade, 2 = shade
Humidity	Percentage of humidity in the air at time of inspection	numeric	2,0	N	0	
Minimum	Predicted minimum temperature on day of recording	numeric	2,0	N	-	
Maximum	Predicted maxiumum temperature on day of recording	numeric	2,0	N	-	
Date	Date that the weather data should be acccessed	datetime	-	Y	-	Must be required in order to calculate the other fields in this table
Time	Time the weather data should be accessed	datetime	-	Y	-	

Link to main

Varroa						
Attribute	**Definition**	**Data Type**	**Size and Decimalization**	**Required**	**Default Value**	**Comments**
Photo	Photo of varroa mite infestation	image		N	NULL	
Notes	Open-ended field where beekeepers can enter in notes from observed varroa in hive.	varchar	1024	N	NULL	
Presence	Field indicating whether varroa mites are present in the hive or not.	boolean	-	N	FALSE	
Link to main						