

# POLLINATION CONTRACT BEST PRACTICES



## INTRODUCTION

Whether you're a grower, broker or beekeeper, 95% of the best practices to ensure successful pollination are things you should complete well before the season begins. The more prep work you do in advance, the less panic you will feel at the last minute.

## CONTRACT ESSENTIALS

Creating a pollination contract is the first step towards setting yourself up for a successful season. Creating the contract is a great exercise to communicate expectations, underline important deadlines and protect both parties from liability.

Some growers and beekeepers think pollination should just be a handshake agreement. While that might be OK if the deal is for only a handful of hives, a handshake agreement tells the other party that your agreement is informal, and they are likely to treat it as such. With a job as important as pollination, you shouldn't give the other party a reason to think they don't have to take your agreement seriously. Signing a contract tells the other party they will be held accountable to uphold their end of the bargain.

Unless you are dealing with a multi-million dollar agreement, you can get away with creating a contract without getting lawyers involved. The included **Sample Pollination Agreement** is an example of how to clearly define terms without pages and pages of *legalese*. There's no guarantee that a contract like this will be upheld in a court of law, but this process of putting both parties' expectations in writing is a good way to prevent a dispute from getting to that point.

Once both parties agree on terms, the responsibilities laid out in the contract will become your checklist of tasks to prepare for pollination. The remainder of this document will review in detail the contents of the attached Sample Pollination Agreement.

## THE POLLINATION AGREEMENT

The Sample Pollination Agreement included below is designed to help growers and beekeepers communicate key expectations and put them in writing. We built the sample agreement to cover details we would want to include if we were a grower looking to rent hives for pollination. Some of the terms are skewed in favor of the grower and would likely receive pushback from the beekeeper, but this is a hypothetical agreement that is meant to guide the negotiation process. Use this agreement as a starting point for negotiations and adjust your terms as needed.

If you'd like a blank version of our Sample Pollination Agreement, please contact us at [info@thebeecorp.com](mailto:info@thebeecorp.com).



Note: Throughout this document, the words "assessment" and "grading" both refer to the same thing: measuring colony strength. "Colony" is mostly used to refer to the bees themselves, whereas "hive" usually refers to the box containing the colony — though both words can be used interchangeably for the most part.

## KEY COMMITMENTS

This section covers the high-level details of your pollination agreement that will be referenced throughout the remainder of the contract. Some items in this section are essential, while other items are “nice-to-have” provisions designed to give the grower leverage in the process and control over the outcomes.

**Number of hives:** The general rule states that mature almond trees require two hives per acre. You can get away with renting fewer hives on younger orchards or self-pollinating varieties.

**Delivery date:** When you expect the bees to arrive on your property. Getting the bees to arrive on schedule can be a hassle at times, especially if they are coming from out-of-state. If you are worried about late delivery, consider including a penalty fee in the “Payment Details” section below.

**Average colony strength:** Experts recommend an average of eight frames of bees for growers who rent two hives per acre. This means you need 16 frames of bees per acre. You can still achieve strong pollination with fewer than two hives per acre as long as average colony strength is higher (Example: If you rent 1.5 hives per acre, average frame strength should be 10.7).

**Minimum acceptable colony strength:** The minimum colony strength you are willing to pay for. Colonies with less than four frames of bees offer little pollination value since only a handful of worker bees will leave the hive to forage. This can save your bottom line if you end up with junk bees, but it puts your beekeeper in a tough spot since they lose income while still owing trucking costs for each weak and dead hive. Don’t feel too bad though — the purpose of this clause is to encourage your beekeeper to be more careful with selecting which hives are strong enough to load on the truck.

**Fee per colony (4-12 frames):** This is the price you pay for each “normal” colony; those above the minimum acceptable strength and below the bonus range.

**Preliminary total fee:** Calculated as Number of Hives \* Fee Per Colony. This is labeled “preliminary” because the final fee will change if any hives under four frames or over 12 frames are found during the assessment. This is mainly used to estimate the down payment owed to the beekeeper.

**Bonus paid for each colony stronger than X:** Each hive above this threshold found during the assessment will result in a bonus payment added on top of the Fee Per Colony. We recommend paying bonuses for colonies stronger than 12 frames because of the high productivity they deliver. One 12-frame colony will send nearly twice as many bees to forage as an 8-frame colony.

**Bonus rate per colony:** The extra fee you will pay for each colony stronger than the bonus threshold found during the assessment.



**EACH STANDARD DEEP FRAME  
75% COVERED WITH BEES EQUALS  
2,000 BEES.**

**YOUR HIVES MUST AVERAGE  
8 FRAMES OF BEES. WE DO NOT  
ACCEPT HIVES WITH LESS THAN 6  
FRAMES OF BEES.**

FRAMES COVERED WITH BEES	BEES PER HIVE	PERCENT OF FIELD BEES	FIELD FORCE PER HIVE
4	8,000	Few to None	Few to None
5	10,000	12.5%	1,250
6	12,000	25%	3,000
7	14,000	30%	4,200
8	16,000	40%	6,400
9	18,000	42.5%	7,650
10	20,000	45%	9,000
11	22,000	47.5%	10,500
12	24,000	50%	12,000

**SOURCES:**

Sheesley, B. & Poduska, B. “Strong Honeybee Colonies Prove Value in Almond Pollination.” California Agriculture: 24(8). 1970.  
Sagili, R.R. & Burgett D.M. “Evaluating Honey Bee Colonies for Pollination.” 2011.  
Edson, J. American Bee Journal: 78-92. 1977.

## COLONY STRENGTH ASSESSMENT

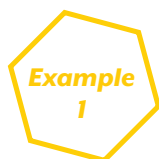
Several of the items discussed in the section above are pointless if you don't grade hives. Hive grading is a grower's most important step towards ensuring successful pollination. For a deeper dive into hive grading and why it's essential, check out The Bee Corp's hive grading guide at [www.thebeecorp.com](http://www.thebeecorp.com).

**Colony strength assessment date range:** Timing of hive grading can be a contentious point of negotiation, especially if the results are used to determine your beekeeper's pay. Beekeepers will push for a later date because colonies will grow in strength each day as the weather warms up and bloom progresses. Beekeepers will also argue that hives should be graded closer to bloom because that's when you need the bees. As a grower, you will want to grade hives ASAP so you have plenty of time to make other arrangements in case colony strength is unacceptably low.

Both parties' concerns are legitimate, so a compromise is likely necessary. You can either choose a date that's mid-way between when hives are delivered and the beginning of bloom, or you can simply grade hives twice — once upon delivery and a second time at 10-20% bloom. The first assessment is for the grower, so they have plenty of time to make backup plans if necessary. The second assessment is used to determine the beekeeper's pay by adding bonuses for strong colonies and deducting colonies under four frames from the final bill.

It's a good idea to offer a range of dates in case grading takes longer than expected, your inspector falls through, the bees are delivered late or the weather doesn't cooperate.

**Number of hives to grade:** Though some growers are satisfied with grading a small sample of hives, both parties can benefit from grading every hive. The grower will want to hunt down each colony under four frames to reduce the cost of pollination, whereas the beekeeper will want to secure a bonus for every high-strength colony delivered. Grading every hive might not seem feasible for larger operations, but the return on investment speaks for itself. If you pay \$200 per hive and \$5 to grade a hive, you only need to find one colony under four frames for every 40 hives graded to make your money back (assuming no bonuses for strong hives). In other words, each weak colony you find pays for the next 39 hives graded.



Take this example of a set of ten hives, where one is under four frames and one is above 12 frames. For a grower who doesn't grade any hives, the total cost is \$1,900. For a grower who grades every hive, the total cost comes to \$1,770, even with an extra \$5 per hive and one \$10 bonus. In this scenario, the grower spends less money on pollination by grading hives.

COLONY #	FRAME STRENGTH (ACTUAL RESULTS)	OPTION #1 — POLLINATION FEE (WITHOUT GRADING)	OPTION #2 — POLLINATION FEE (WITH GRADING)	OPTION #2 — COST TO GRADE
1	8	\$190	\$190	\$5
2	9	\$190	\$190	\$5
3	5	\$190	\$190	\$5
4	7	\$190	\$190	\$5
5	8	\$190	\$190	\$5
6	11	\$190	\$190	\$5
7	<b>14</b>	\$190	<b>\$200</b>	\$5
8	6	\$190	\$190	\$5
9	<b>2</b>	\$190	<b>\$0</b>	\$5
10	8	\$190	\$190	\$5
<b>TOTAL WITHOUT GRADING</b>		<b>\$1,900</b>	\$1,720	\$50
			<b>TOTAL WITH GRADING</b>	<b>\$1,770</b>

**Example  
2**

Here's another example where nine out of ten hives are in the bonus range and one is weaker than four frames. Even with a \$10 bonus payment for nine hives and \$50 to grade all ten, the grower who grades still pays \$50 less than the grower who doesn't grade at all.

COLONY #	FRAME STRENGTH (ACTUAL RESULTS)	OPTION #1 — POLLINATION FEE (WITHOUT GRADING)	OPTION #2 — POLLINATION FEE (WITH GRADING)	OPTION #2 — COST TO GRADE
1	18	\$190	\$200	\$5
2	17	\$190	\$200	\$5
3	13	\$190	\$200	\$5
4	15	\$190	\$200	\$5
5	16	\$190	\$200	\$5
6	16	\$190	\$200	\$5
7	14	\$190	\$200	\$5
8	13	\$190	\$200	\$5
9	<b>2</b>	\$190	<b>\$0</b>	\$5
10	13	\$190	\$200	\$5
<b>TOTAL WITHOUT GRADING</b>		<b>\$1,900</b>	\$1,800	\$50
			<b>TOTAL WITH GRADING</b>	<b>\$1,850</b>

**Who's responsible for assessment:** In most cases, the grower will agree to coordinate hive grading and cover the costs. Though this will almost always say responsibility belongs to the grower, it's not a bad idea to keep this in here to ensure both parties are aware of the plan.

**PAYMENT DETAILS**

With the various performance-based incentives that impact the final price, this section is necessary to spell out some of the finer details. There aren't many strategic considerations in this section, but that doesn't mean you should ignore it.

**Half upfront:** A 50% upfront payment is standard for most pollination agreements. Important things here are clarifying that it's 50% of the preliminary total and the date by which this payment must be received.

**Full payment:** When the grower must pay the remaining balance and the terms of a penalty in the event of a late payment.

**Bonuses:** Certifies the bonus payout for each strong hive found during the assessment.

**Failure to complete assessment:** If the grower fails to arrange hive grading in the agreed upon time frame, this states that the grower agrees to pay the preliminary total.

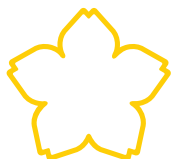
**No payment for colonies below minimum:** Clarifies that the grower owes nothing for any colony below the minimum acceptable colony strength found during the assessment.

**Discount for low average:** This clause isn't mentioned anywhere else, but it's certainly worth including. This is the beekeeper's penalty for delivering hives below the agreed-upon average strength. While the minimum acceptable colony strength and bonus threshold cover outliers on an individual basis, this clause protects the grower from hives that are weak on average.

**Remedy for low average:** Gives the beekeeper a chance to remedy hives that are weak on average by giving them a few days to remove weak hives and replace them with strong ones. This also shifts the responsibility of arranging a strength assessment to the beekeeper if they wish to avoid the penalty outlined in the clause above.

## ADDITIONAL WARRANTIES

The purpose of this section is designed to spell out the responsibilities assumed by each party. You might think some of these items are common sense, but it's best not to leave any doubt in case a conflict arises.



### GROWER'S DUTIES

**Provide maps:** As a grower, your goal here should be to make delivering hives as painless as possible for your beekeeper. Label each map with details such as where to enter and exit the orchard (provide combo or key location if gates are locked), location and number of hives at each drop, and any hazards to note (like large bumps to avoid or narrow passages over canals).

Though a balanced distribution of hives within the orchard is important to ensure maximum pollination coverage, there are other things to consider when determining hive drop locations, like theft prevention and ease of access. Avoid placing drops alongside major roads where thieves can easily spot hives and quickly load them up. At the same time, avoid placing drops in spots that are difficult to access. You will want your beekeeper to work the bees throughout pollination, so don't select drop locations in spots that are a pain to visit. It's also a good idea to physically mark drop locations by tying ribbons on branches.

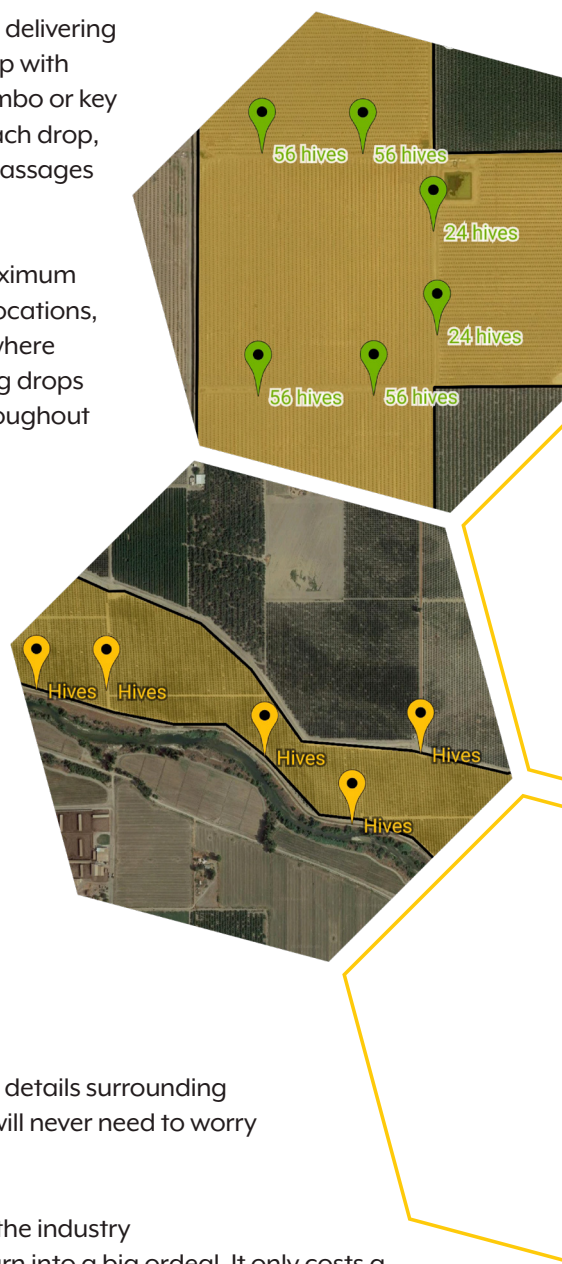
If parts of your orchard are prone to flooding, save yourself the headache and don't place any hives there. If that's not feasible, you should provide an elevated platform to keep hives well above the water.

Print your maps using satellite view so your beekeeper can get a rough idea of the terrain. Digital maps are an excellent alternative. We use a mobile app called Map Marker to plot the boundaries of our growers' orchards, place pins on hive drop locations and write notes on how many to grade. The app makes it easy to share specific maps, so it's worth spending a few hours to build a dedicated pollination map that you can save for future seasons.

**Limit exposure to harmful chemicals:** Growers are usually good about spraying responsibly during pollination, but it doesn't hurt to include this language since it can be a major concern for beekeepers.

**Assume liability for use of harmful chemicals:** If your beekeeper is caught up on details surrounding spraying, this should help them rest easy. Just stick to your application plan, and you will never need to worry about this clause.

**Assume liability for damage to bees & equipment:** The best-trained workers in the industry aren't immune from mistakes. If one of your guys damages a hive or two, don't let it turn into a big ordeal. It only costs a couple hundred dollars to replace a hive, so it won't set you back too much. It wouldn't hurt to discuss replacement value with your beekeeper and attach that to the agreement.





## BEEKEEPER'S DUTIES

**Distribute hives after delivery:** Any good beekeeper will want to unload the hives from the truck ASAP, so it's unlikely this will come into play if you're working with the right folks.

**Remove hives in a timely manner:** Don't ask your beekeeper to linger. Most pollination is completed in a small window, and individual flowers are usually depleted of pollen one or two days after they bloom. Research shows that hives should be removed when your latest blooming variety are at 90% petal fall. This is a tough call to make because it will look like the bees are still working the blooms. But these bees aren't pollinating your flowers, they are collecting the nutrient-rich nectar

your young almonds rely on for early development. It may seem counter-intuitive, but if you don't remove the bees in time, they'll deplete the valuable nutrients your trees need to produce a strong yield.

**Assume liability for theft:** Beekeepers are plenty aware of the risk of hive theft during almond pollination, plus their insurance should cover the loss. You should still take practical measures to prevent theft, but it's not your fault if hives are stolen off of your property.



## DUTIES OF BOTH PARTIES

**Provide reasonable notice:** It's common to include language like this in most contracts. This is just meant to create a paper trail in case changes need to be made to the agreement.

**Respond to communication:** This is another one of those things that seem like common sense until it's not. If the other party needs to be reminded about this line, you should take the hint that your business isn't important to them.

## CLOSING THOUGHTS

It's well worth the effort to build a customized pollination agreement to suit your needs. Not only does it help by laying out what is expected of each party, the exercise of creating the agreement can be a valuable opportunity to review your pollination plan and identify areas for improvement. Plus, you can insert strategic items and incentives to boost your chances of getting the best bees and producing your best yield.

*If you'd like a blank version of our Sample Pollination Agreement, please contact us at*

**[INFO@THEBEECORP.COM](mailto:INFO@THEBEECORP.COM)**



For both beekeepers and growers, Verifli is brought to you by The Bee Corp. Ensure pollination transparency with easier, faster hive grading at: [www.thebeecorp.com](http://www.thebeecorp.com).  
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Call us at **(559) 314-2030** or visit **[thebeecorp.com](http://thebeecorp.com)** today.

## SAMPLE POLLINATION AGREEMENT

### GROWER

### BEEKEEPER

**NAME:** *Ellie Symes*

**ADDRESS:** *123 Orchard Place,  
Fresno, CA*

**PHONE:** *(519) 314-2030*

**NAME:** *Wyatt Wells*

**ADDRESS:** *456 Honey Lane,  
Indianapolis, IN*

**PHONE:** *(317) 793-2337*

### KEY COMMITMENTS

<b>NUMBER OF ACTIVE BEE COLONIES</b>	<i>1,000</i>	<b>TO BE DELIVERED NO LATER THAN</b>	<i>2/5/2021</i>
<b>AVERAGE COLONY STRENGTH</b>	<i>8 frames</i>	<b>MINIMUM ACCEPTABLE COLONY STRENGTH</b>	<i>4 frames</i>
<b>FEE PER COLONY (4-12 FRAMES)</b>	<i>\$190</i>	<b>PRELIMINARY TOTAL FRAME</b>	<i>\$190,000</i>
<b>BONUS PAID FOR EACH COLONY STRONGER THAN</b>	<i>12 frames</i>	<b>BONUS RATE PER COLONY</b>	<i>\$10</i>

### COLONY STRENGTH ASSESSMENT

<b>COLONY STRENGTH ASSESSMENT TO BE COMPLETED NO SOONER THAN:</b>	<i>2/2/2021</i>	<b>COLONY STRENGTH ASSESSMENT TO BE COMPLETED NO LATER THAN:</b>	<i>2/10/2021</i>
<b>NUMBER OF HIVES TO BE ASSESSED</b>	<i>500 or more</i>	<b>PARTY RESPONSIBLE FOR ASSESSMENT</b>	<i>Grower</i>

### PAYMENT DETAILS

- **HALF UP FRONT:** Grower agrees to pay 50% of preliminary total fee to Beekeeper prior to 12/31/2020.
- **FULL PAYMENT:** Grower agrees to pay remaining fee no later than 60 days after removal of hives, after which Grower shall pay 5% interest each 30 days until payment is received.
- **BONUSES:** Grower agrees to pay bonus rate for each hive above bonus colony strength threshold found during assessment.
- **FAILURE TO COMPLETE ASSESSMENT:** If Grower fails to arrange colony strength assessment within agreed-upon date range, Grower agrees to pay Preliminary total fee.
- **NO PAYMENT FOR COLONIES BELOW MINIMUM:** Beekeeper agrees to deduct from preliminary total fee any hive(s) below minimum colony strength found during assessment.
- **DISCOUNT FOR LOW AVERAGE:** If Average colony strength is not met, Beekeeper agrees to reduce Fee per colony by \$20 for each frame below agreed-upon Average colony strength (7 frame avg = \$20 off fee per)
- **REMEDY FOR LOW AVERAGE:** If Average colony strength is not met, Beekeeper may replace weak hives within 48 hours of initial assessment. Beekeeper agrees to arrange secondary assessment within 96 hours of initial assessment, otherwise Beekeeper shall accept agreed-upon discounted fee per colony. Grower agrees to honor results of secondary assessment.

### ADDITIONAL WARRANTIES

#### GROWER AGREES TO:

- Provide detailed maps including number of hives to place at each orchard, how hives shall be distributed within each orchard, which roads the beekeeper shall use, access instructions if locked gates are present, etc.
- Make reasonable effort to limit exposing bees to chemical applications such as pesticides, insecticides, fungicides, herbicides and any other potentially harmful chemicals.
- Assume liability in the event that bee colonies are destroyed as a result of chemical application.
- Assume liability in the event that Beekeeper's equipment becomes damaged by farm equipment.

#### BEEKEEPER AGREES TO:

- Distribute hives to indicated locations within 48 hours after delivery.
- Remove hives from Grower's property within 72 hours following Grower's request. Beekeeper may remove hive immediately if Grower fails to request removal by March 10, 2021.
- Assume liability in the event of theft or vandalism of bees and equipment not caused by Grower's employees.

#### BOTH PARTIES AGREE TO:

- Provide reasonable notice in writing of any material changes to this agreement.
- Make best effort to respond to communication within 48 hours.

### SIGNATURES

\_\_\_\_\_  
GROWER

\_\_\_\_\_  
DATE

\_\_\_\_\_  
BEEKEEPER

\_\_\_\_\_  
DATE