



Apple/Pear refrigerators

Posted by [Joanne Patton](#)
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[Joanne Patton](#)

[Apple/Pear refrigerators](#)

December 15, 2016 11:47PM

Hi folks,

Registered: 7 years ago
Posts: 62

Next year I'm hoping to have a large enough harvest to warrant the purchase of a cooler/refrigerator with humidity controls, especially for pears.

Would really appreciate knowing what brands you have had good luck with and maybe even not so good luck. Would prefer to purchase a used one.

Many thanks in advance and I hope you all have a very Merry Christmas!

Joanne Patton, Squire Oaks Farm
Zone 6A, Northern Virginia

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[Pat Pryal](#)

[Re: Apple/Pear refrigerators](#)

December 16, 2016 02:14AM

I'm a few years away before I have to worry about storing any apples, but I will probably build some kind of walk-in cooler myself. I read about people who take an ordinary window air conditioner and do some kind of modification on it so that it can cool all the way down to 32F or so. A lot cheaper than buying compressors, fans etc..

Registered: 7 years ago
Posts: 76

Pat

Brampton Lake Orchards

Zone 4a Upper Michigan

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[Chris Vlitas](#)

[Re: Apple/Pear refrigerators](#)

December 16, 2016 08:34AM

Edited for brevity

Registered: 10 years ago
Posts: 47

Edited 1 time(s). Last edit at 09/30/2022 05:45PM by Chris Vlitas.

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[Todd Parlo](#)

[Re: Apple/Pear refrigerators](#)

December 16, 2016 07:09PM

The cheapest option in my opinion is building your own, if you are talking walk in cooler size. The first one I constructed for around a thousand dollars, give or take, for the structure itself. Add to that the cooling and humidifying mechanisms. We used an lg air conditioner interfaced with a coolbot unit (look it up), which worked sensationally. This all will bypass the need for a charged condenser system which may require a professional to install. The former situation is almost turnkey. For humidity there are a lot of options, but one we have used is a hardwired humidistat which can regulate a vaporizer, fogger, etc. This is also cheap. Setups like this allow for a lot of tweaking, the replacement of parts that do not work or do not last and so on. If you buy a prefab system and you do not like it, there is little you can do to alter it. Our first cooler, an 8 x 12 for all the above (my labor for construction and wiring) was around 1500.00. (This would be a few hundred more normally, as I had some used parts).

Registered: 10 years ago
Posts: 301

For all those out there with small amounts, and own a freezer, there are units (think 50-100 bucks) that will turn it into a fridge, allowing dual purposing. I find this handy as the freezer is empty before a chicken slaughter, etc, and can be used for small amounts of early apples, etc, fitting 5 or 6 bushels.

And for anyone planning for a big operation, please, please think subterranean. By starting with a true cellar you not only begin with a lower temp, you have a huge buffering capacity. That is, it will moderate very slowly and avoid wasting energy when temps and humidity outside fluctuate wildly as they often do.

Finally, with anything in a normally unheated space, you will likely need, ironically, heating arrangements. Here, as early as September we can have temperatures that would freeze the stored fruit. Here, too, the cellar sytem would be handy. There are plenty of heating situations apparent to us all, but if the space is properly insulated, a cheap 1500 watt space heater with timer or thermostat is easy to deal with and typically hit you for only 25

cents an hour at full capacity.

[Walden Heights Nursery & Orchard](#)

Zone 3 in Vermont

Edited 2 time(s). Last edit at 12/16/2016 07:19PM by Todd Parlo.

[Reply](#) [Quote](#)

[Pat Pryal](#)

[Re: Apple/Pear refrigerators](#)

December 17, 2016 03:38AM

Todd, yes, that's what I was talking about, the "coolbot" unit. Neat little device for sure

Registered: 7 years ago
Posts: 76

Pat

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[Joanne Patton](#)

[Re: Apple/Pear refrigerators](#)

December 18, 2016 04:42PM

Thank you all for the responses and ideas! Got me to thinking about the tack room in our barn. It's not huge 10x10 maybe, but when we finished it out, we put a vapor barrier down first, then flooring, insulated the walls before putting up some cheap vinyl and we have a window. I think the tack room might be the perfect solution. Easy to put an AC unit in the window and look into humidity controls.

Registered: 7 years ago
Posts: 62

Awesome ideas - I will check the coolbot.

Do I really want to cool to 32?!?! Wow, that's cold! One way to keep me out of the tack room but my husband will love it!

Thanks again gents!!

Joanne Patton, Squire Oaks Farm

Zone 6A, Northern Virginia

[Reply](#) [Quote](#)

[Todd Parlo](#)

[Re: Apple/Pear refrigerators](#)

December 18, 2016 05:34PM

One thing that is often overlooked is the floor. At the time you are likely to be cooling the ground temp will be too warm and invade the space. This means insulating. In general, earth temperatures will help the situation (as in the aforementioned buffering effect of cellars), but when you are trying to move temps quickly or when fighting ground or outside degrees, insulating is crucial. Also important, of course is reducing air leakage, so caulking will be a friend, as is a snug fitting door. I even used a heavy blanket as an additional air barrier inside the door.

Registered: 10 years ago
Posts: 301

As for 32 degrees, that would be nice. Since fruit tissue contains plenty of soluble solids, the freezing point is likely to be in the high twenties. The afterripening effect is dramatic every degree warmer you go. A 10 point increase can mean cutting the shelf life in half or worse. The coolbot setup in my experience can move the temperature in a small cooler from 70 degrees to 32 in about 10 minutes (air temp not fruit).

Finally, be smart with the procedure. Moving fruit into the cooler when it is precooled by overnighting in the dooryard is wiser than dumping loads of warm fruit into an energy consuming room.

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[Pat Pryal](#)

[Re: Apple/Pear refrigerators](#)

December 22, 2016 05:54AM

Great info Todd, thanks. I think I'm going to start working on plans for a walk in cooler next spring.

Registered: 7 years ago
Posts: 76

Pat

Brampton Lake Orchards

Zone 4a Upper Michigan

[Reply](#) [Quote](#)

[David Mobley](#)

[Re: Apple/Pear refrigerators](#)

January 19, 2018 12:39AM

I am also planning on building a cooler next year and wondered if anyone had any experience with straw bale structures?

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