

# Open Interest in the CME Live Cattle Futures Contract

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## A Volatile Start to 2020

It is difficult to overstate how volatile the first few months of 2020 have been. This is true of all sorts of markets, personal lives, and institutions. Live cattle futures markets have been no exception. The major drivers of the volatility are the disruption and uncertainty caused by the COVID-19 pandemic.<sup>1</sup> There are no doubt other factors at play regarding the effects on the live cattle futures markets but COVID-19 impacts are at the forefront. The purpose of this brief paper is to document and analyze one specific, major change related to the CME Live Cattle Futures Contract—a historic decrease in open interest.

Open interest is defined in this paper as the number of outstanding (or open) futures contracts in the CME Live Cattle Contract. Open interest data can be collected in real time for each available option. It is also reported in the weekly Commitment of Traders (COT) report published by the Commodity Futures and Trading Commission (CFTC). COT data are reported for several commodities and offer a snapshot of what groups have open positions in a particular derivative. Detailed explanation of the report, along with access to the data, is available on the [CFTC COT page](#). Entities holding an established number of contracts must report their classification to the CFTC. The disaggregated COT groups traders into five groups. These are defined in Table 1.

Barring trading holidays, the COT report is released on Friday afternoon and is based on open interest for all available options for a given commodity contract on Tuesday of that same week. It is crucial to keep this in mind when looking at the report. COT data do not allow for analyzing individual contract months and represent a lagged snapshot of who has open positions.

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<sup>1</sup> For an overview of COVID-19 the impacts on livestock sector, see this April 10, 2020 update from Glynn Tonsor: <https://agmanager.info/news/recent-videos/ongoing-effects-livestock-markets-covid-19-pandemic>

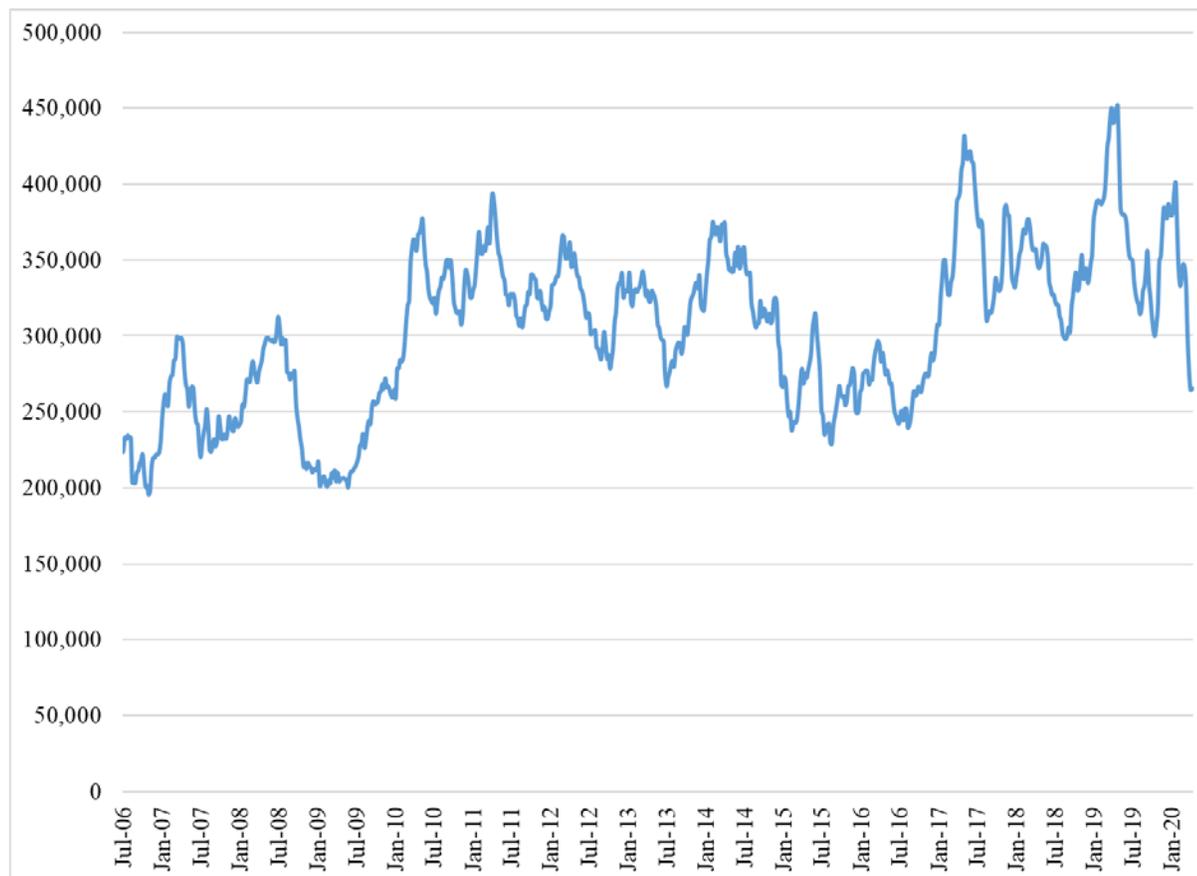
<b>Table 1. COT Group Definitions</b>	
<b>Group</b>	<b>Definition</b>
Producer/Merchant/Processor/User	Traders who have a direct interest in the underlying cash commodity and are using the contract to hedge
Swap Dealers	Traders who primarily deal in commodity swaps with their clients and use futures markets to hedge that exposure
Managed Money	Conduct organized futures trading on behalf of clients
Other Reportables	Traders who do not fit into any of the previous categories but hold positions large enough to necessitate reporting to CFTC
Non-Reportables	Positions held by trading entities that do not reach the reporting requirement threshold set by CFTC

Over the past several years, live cattle open interest has trended up (Figure 1). The highest open interest ever for the contract in a COT report was published in the April 23,2019 report.<sup>2</sup> That week there were 451,531 open positions. It is also evident in Figure 1 that January to April of 2020 has seen one of the most rapid decreases in open interest of the past decade. Of the top ten largest week to week declines in COT open interest in live cattle since 2006, four were between January 1 and April 7 of 2020. There were mass exits from the contract in 2017 and 2019. However, in 2017 the shift was smaller in magnitude and was slightly more gradual in2019.

<sup>2</sup> Note that live cattle open interest might have been higher than this on another day but this is highest open interest to be captured in a COT report.



**Figure 1. Total Open Interest in CME Live Cattle Contract**



**Note: Data are from weekly CFTC Commitment of Traders Reports for Futures Only. Reports from June 13, 2006 to April 14, 2020 included.**

COT data allows for a more detailed understanding of how open interest has changed. Every open position requires that one entity is long the position and another is short the position, such that Total Open Interest = Long Open Interest = Short Open Interest. The January 21, 2020 COT report was the highest open interest for the year. Table 2 compares long and short positions from that week for all groups to positions in the April 14, 2020 report. Over this four-month period open interest decreased by 33.78%. A sizeable part of the decline in open interest was due to liquidation of spreads. Spread positions are reported only for Swap Dealers, Managed Money, and Other Reportables. I have them grouped together in the table. Given that spreads for this period were extremely negative (measured by nearby minus deferred) relative to historic levels, it is not surprising that so many traders got out of those positions.



<b>Table 2. Changes in Open Interest Between January 21 and April 14 COT Reports</b>				
	<b>January 21, 2020</b>	<b>April 14, 2020</b>	<b>Change</b>	<b>% Change</b>
<b>Long Open Interest</b>				
Producers/Merchants	45,768	40,100	-5,668	-12.38%
Swap Dealers	100,453	71,379	-29,074	-28.94%
Managed Money	115,817	38,045	-77,772	-67.15%
Other Reportable	32,256	32,556	300	0.93%
Non-Reportable	25,867	32,989	7,122	27.53%
All Spreads	80,372	50,154	-30,218	-37.60%
<b>Short Open Interest</b>				
Producers/Merchants	208,231	132,897	-75,334	-36.18%
Swap Dealers	6,026	2,524	-3,502	-58.11%
Managed Money	30,425	37,962	7,537	24.77%
Other Reportable	26,009	8,280	-17,729	-68.16%
Non-Reportable	49,470	33,406	-16,064	-32.47%
All Spreads	80,372	50,154	-30,218	-37.60%
<b>Total Open Interest</b>				
	<b>400,533</b>	<b>265,223</b>	<b>-135,310</b>	<b>-33.78%</b>

Managed money dealers liquidated two-thirds of their long positions. They also added 7,537 short positions. Swap dealers decreased long and short positions by 28.94% and 58.11%, respectively. Producers and Merchants, who are the hedgers in the market, decreased long and short positions. Part of this is timing, of the reports chosen for Table 2, as April is a contract month and we would expect more hedgers to liquidate positions than in a non-spot month. The behavior of long hedgers confirms the notion that there are relatively few out there interested in using the live cattle contract to hedge the purchase of live cattle. If there were, one would think the recent low futures prices would be attractive to long hedgers, giving incentive to enter the market and establish a low target price. The only category to add a substantial percentage of long positions was Non-reportables. This group is generally referred to as small speculators, though they do not necessarily have to be. They often make changes that are contrary to the Other Reportables (considered to be Large Speculators) and seem to be doing so this year. Large speculators liquidated 68%

of short positions. This was likely profit taking on those positions as prices declined. However, it is worthwhile to note that their long positions are basically unchanged, so they have not yet re-entered the market.

### This Week's Changes

The week to week changes in the April 14 COT Report, shown in Table 3, are perhaps indicative of a change in the 2020 trend.

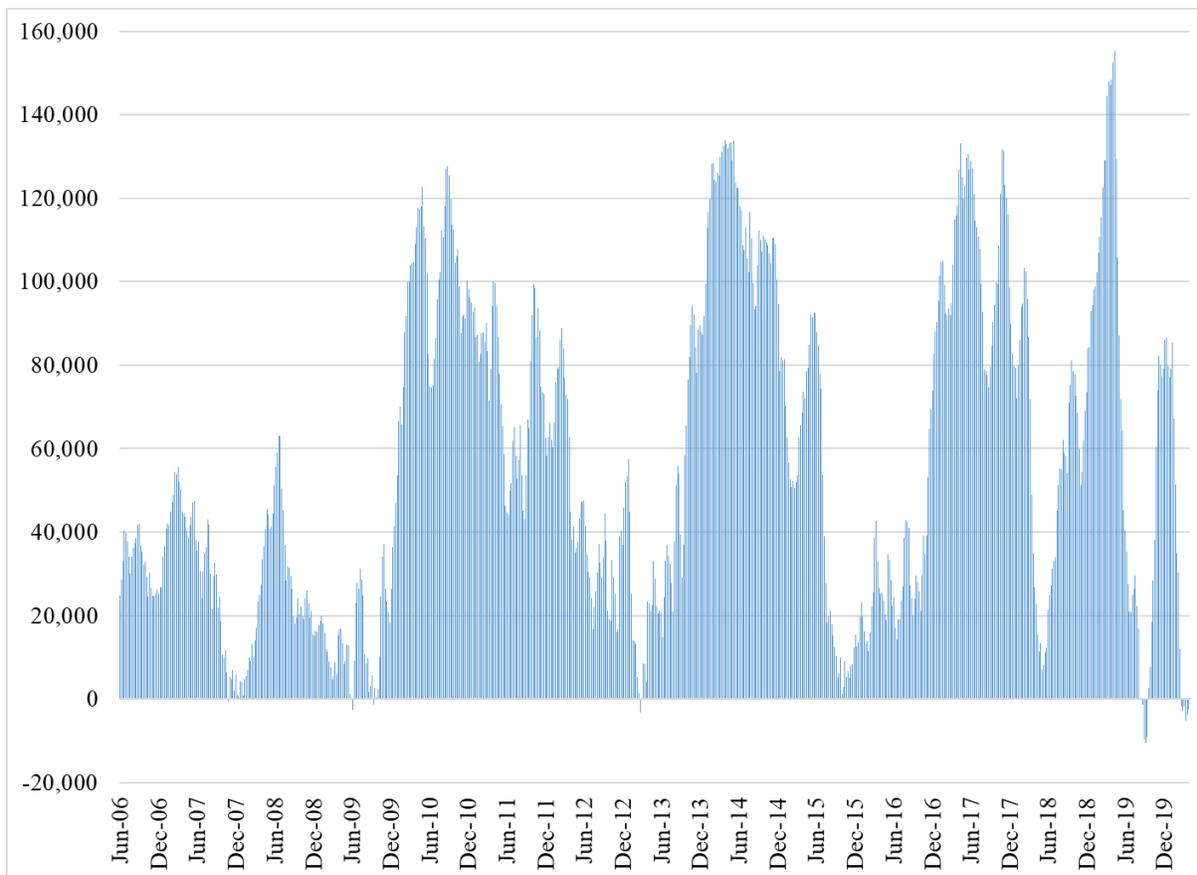
<b>Table 3. Changes in Open Interest Between April 7 and April 14 COT Reports</b>				
	<b>April 7, 2020</b>	<b>April 14, 2020</b>	<b>Change</b>	<b>% Change</b>
<b>Long Open Interest</b>				
Producers/Merchants	46,459	40,100	-6,359	-13.69%
Swap Dealers	70,813	71,379	566	0.80%
Managed Money	37,130	38,045	915	2.46%
Other Reportable	30,544	32,556	2,012	6.59%
Non-Reportable	35,524	32,989	-2,535	-7.14%
All Spreads	44,889	50,154	5,265	11.73%
<b>Short Open Interest</b>				
Producers/Merchants	134,703	132,897	-1,806	-1.34%
Swap Dealers	2,434	2,524	90	3.70%
Managed Money	39,485	37,962	-1,523	-3.86%
Other Reportable	8,080	8,280	200	2.48%
Non-Reportable	35,768	33,406	-2,362	-6.60%
All Spreads	44,889	50,154	5,265	11.73%
<b>Total Open Interest</b>				
	<b>265,359</b>	<b>265,223</b>	<b>-136</b>	<b>-0.05%</b>

Two notable changes are the increase in spread trade and change in Managed Money positions. Managed money liquidated a few short positions and added long positions. Other Reportables added both long and short positions, but more of the former. This could mean that at least some spec traders see current prices approaching a bottom or, at least, expect a short term rally. Total Open Interest barely changed, after increasing slightly last week. Whether this is a short-term pause or a turnaround in Open Interest is yet to be seen.

### Managed Money

The January to April time frame offers one other rarity. That is, Managed Money traders switched to being net short the contract. In fact, this was true in the six COT reports before April 14, 2020.

**Figure 2. Managed Money Net Position in the CME Live Cattle Contract**



**Note: Data are from weekly CFTC Commitment of Traders Reports for Futures Only. Reports from June 13, 2006 to April 14, 2020 included. Net Position is Long Positions – Short Positions.**

As you can see, Managed Money traders are seldom net short. The April 14 report showed a Net Position of +83 contracts, which represents the changeover from being net short to net long.



## Summary

COT reporting has definite limitations and should be considered along with other market data. However, it is one of the few publicly available means of discerning who is active in trading a contract. Liquidity is important for the vitality and robustness of any contract. Anytime there is such a decline in open interest, concerns are raised. Open Interest, of course, is only a single measure. For example, volume is not mentioned in the COT report but is also important.

The 2020 decline in live cattle Open Interest has been dominated by:

1. Short Hedgers liquidating short positions and not replacing them (-75,334)
2. Managed Money liquidating short long positions (-77,772)
3. Swap Dealers liquidating long and short positions (-32,576)
4. A sharp decline in spread trading (-30,218)

The recent COT report indicates some of these trends could be reversing. In general, this would be good news for users of the live cattle contract, as Increased Open Interest indicates more trading activity. This, hopefully, translates into more robust price discovery and ability of hedgers to establish positions.

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