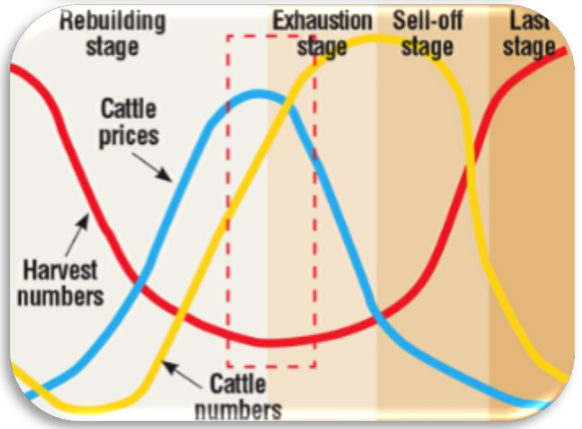
Cattle Market Outlook: Rebuilding the Herd (?) in 2023



Texas Alliance for Water Conservation

9th Annual Water College

1/19/2023

Justin Benavidez

Assistant Professor, Extension Economist

Texas A&M AgriLife Extension

Amarillo, TX

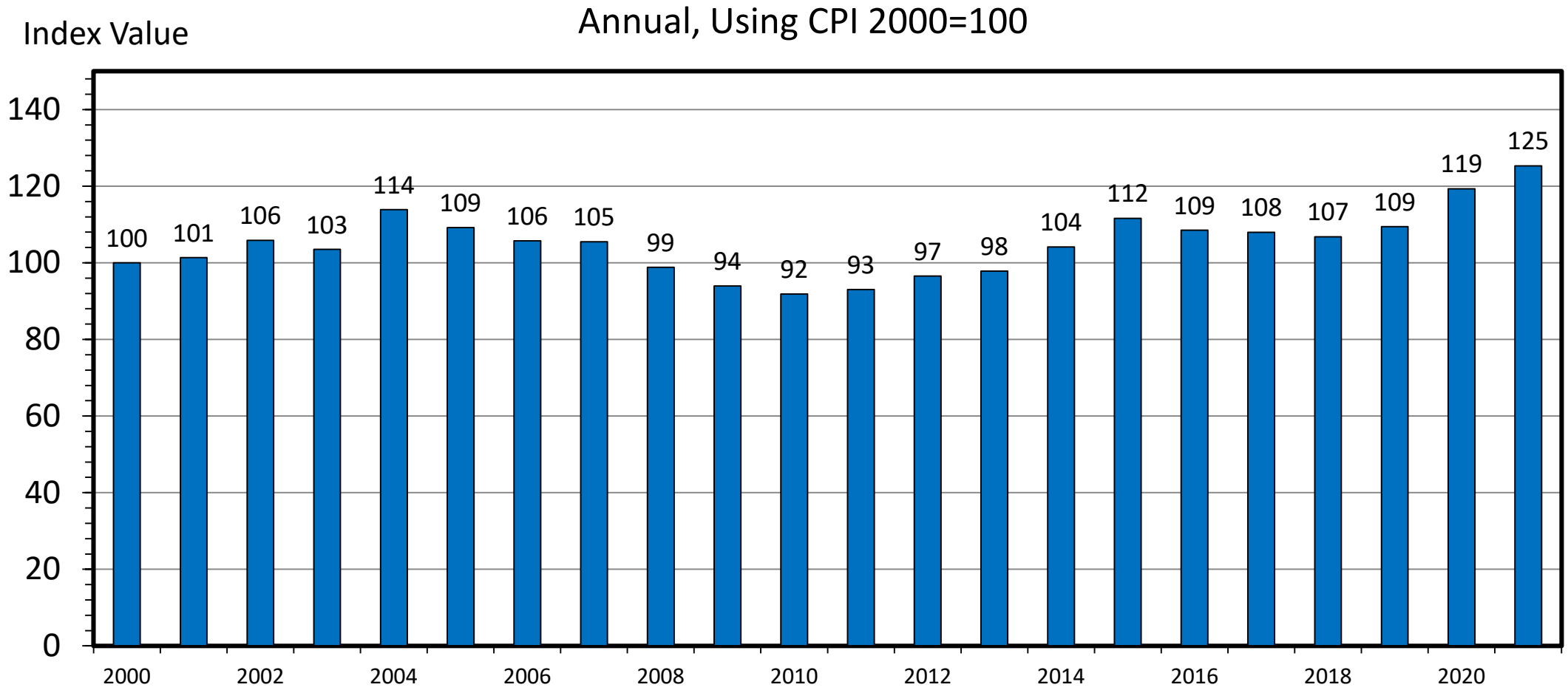
TEXAS A&M AGRILIFE EXTENSION

Topics we'll cover today

- Beef cattle market outlook
  - Demand for beef and other proteins
  - Supply
- Restocking the herd after drought
  - When?
  - How?
  - What is the profitable way to go?
- The influence of a growing live cattle demand in West Texas

Beef Cattle Market Outlook

Retail All Fresh Beef Demand Index

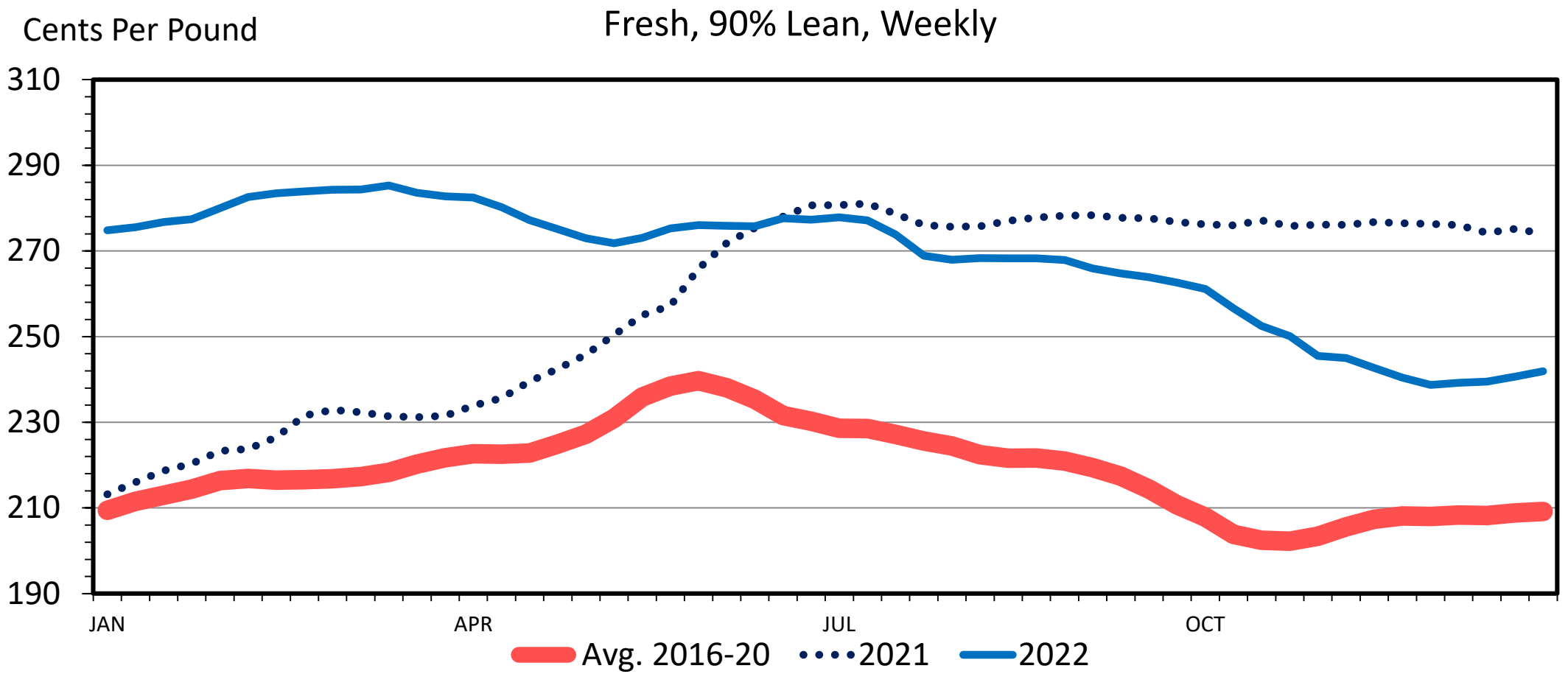


Data Source: Bureau of Labor Statistics, USDA-ERS, Compiled & Analysis by LMIC

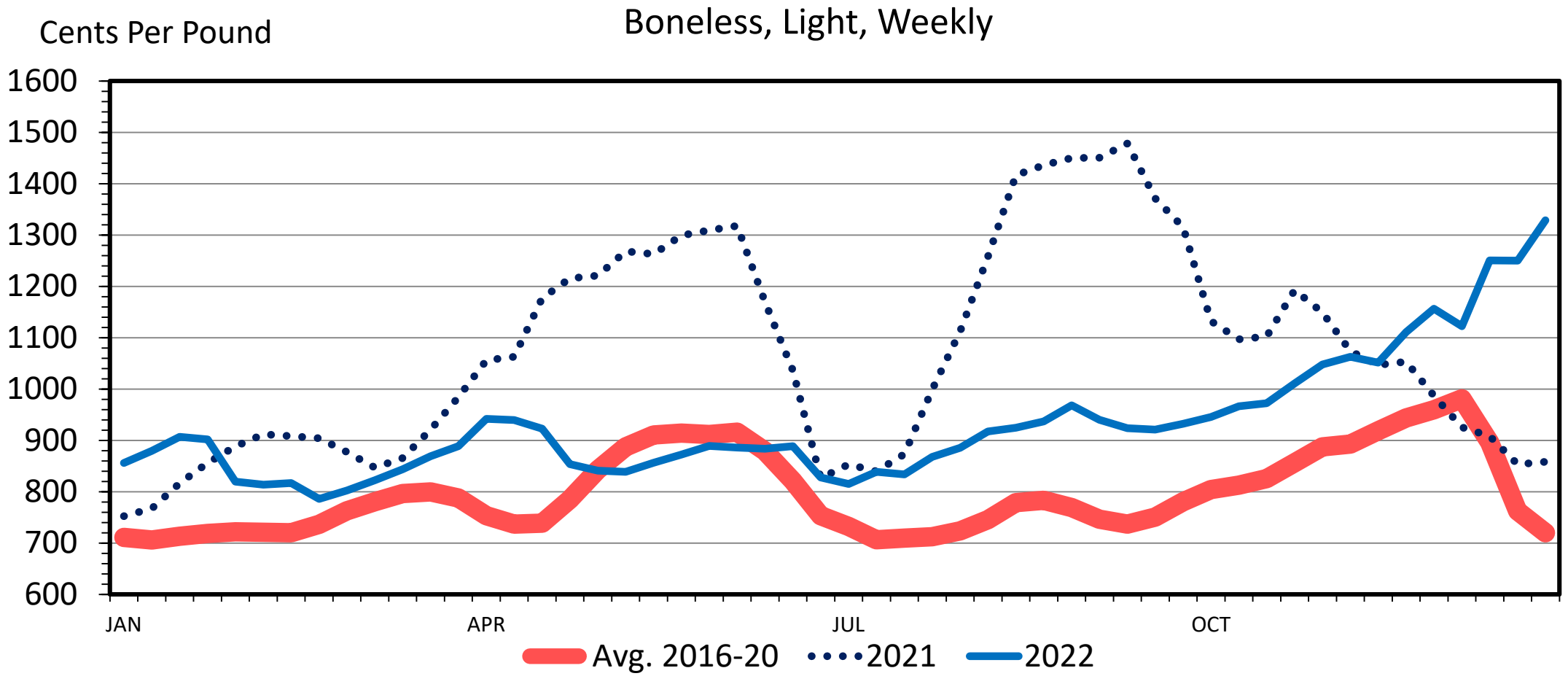
Livestock Marketing Information Center

TEXAS A&M AGRILIFE EXTENSION

Wholesale Boneless Beef Prices



Wholesale Beef Ribeye Prices



Data Source: USDA-AMS

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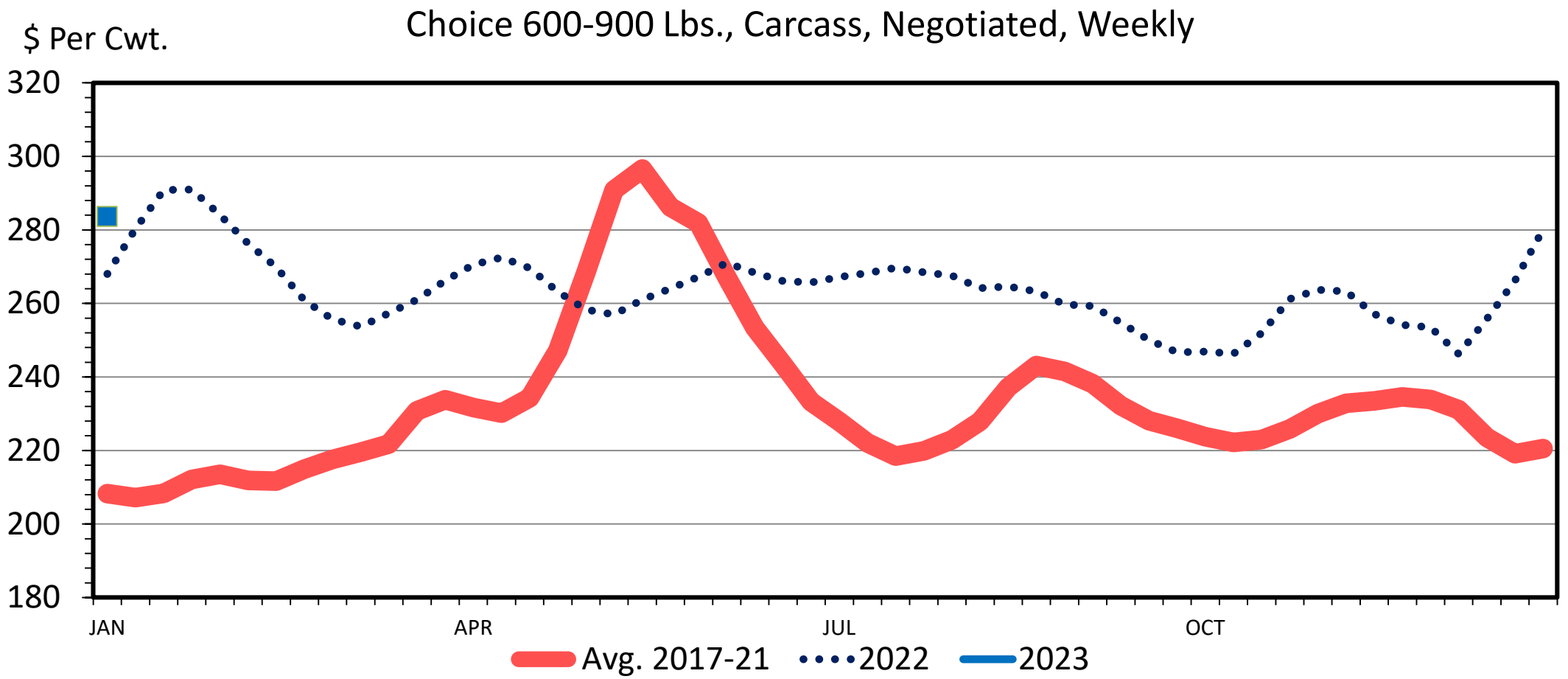
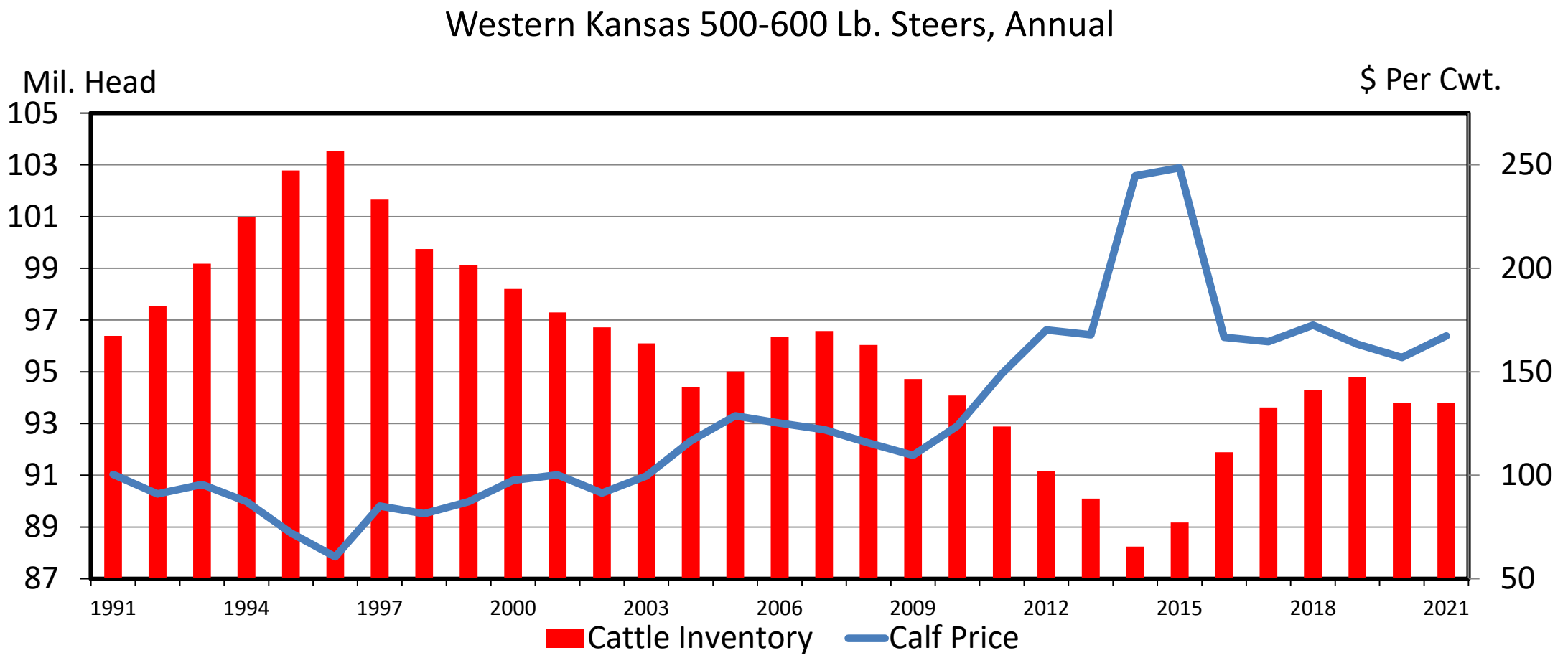
Boxed Beef Cutout Value



Calf Prices and Cattle Inventory

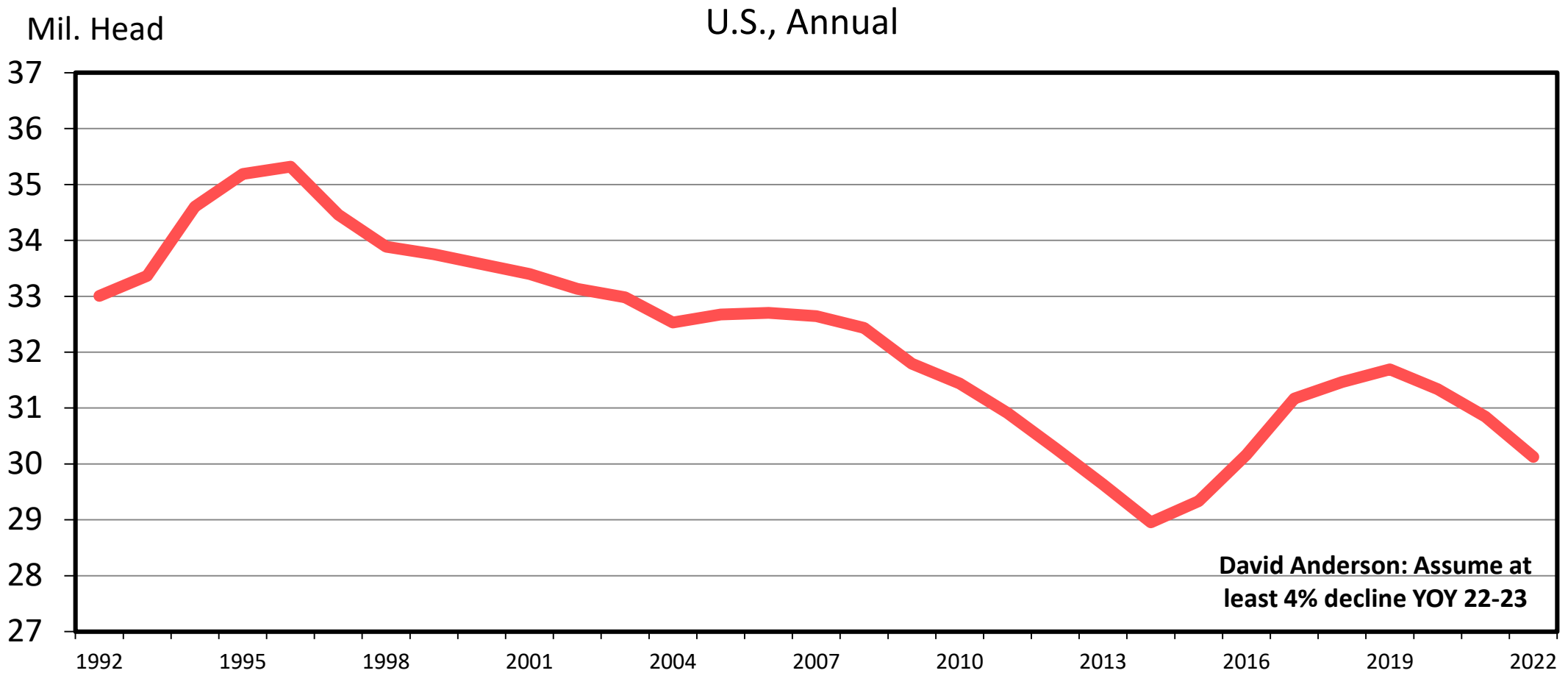


Data Source: USDA-NASS

Livestock Marketing Information Center

TEXAS A&M AGRILIFE EXTENSION

January 1 Beef Cow Inventory



Data Source: USDA-NASS

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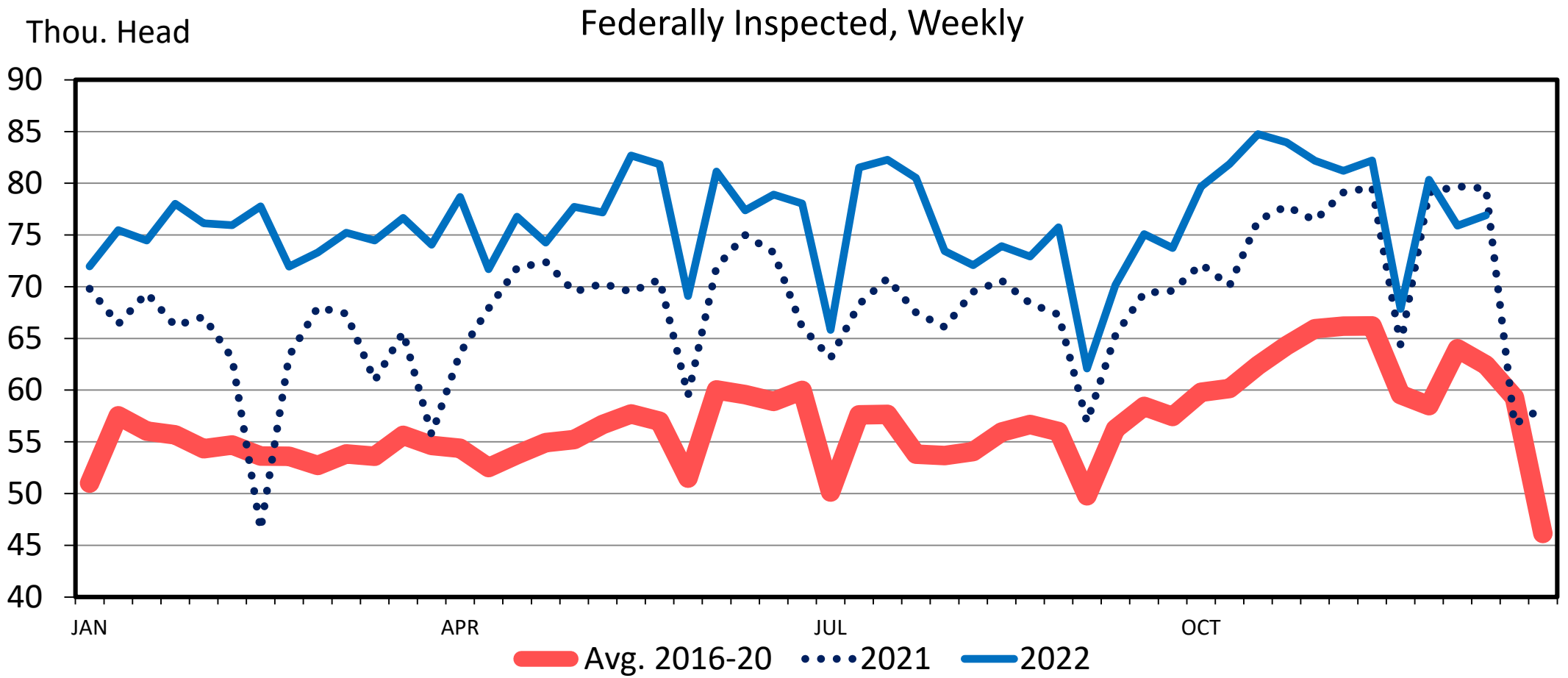
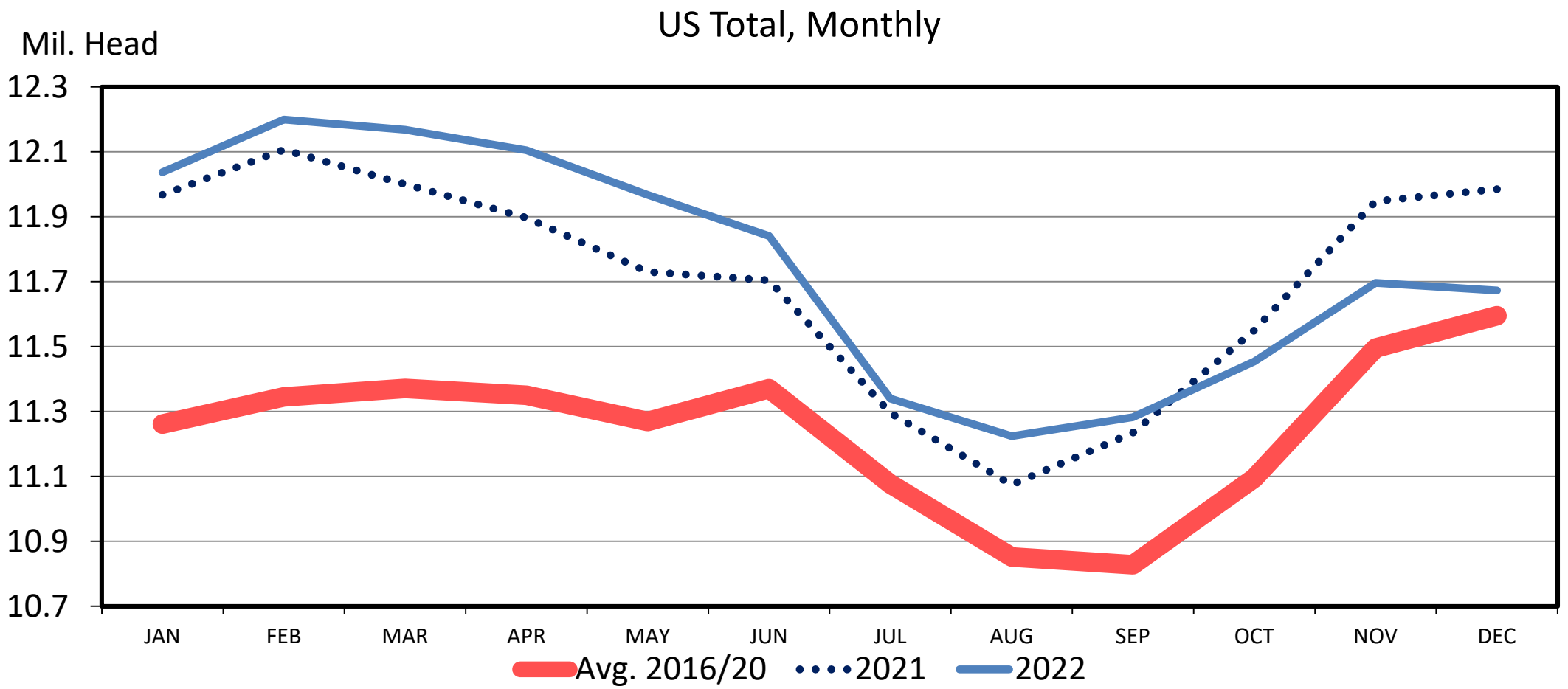
Beef Cow Slaughter



Data Source: USDA-AMS & USDA-NASS

Livestock Marketing Information Center

Cattle on Feed

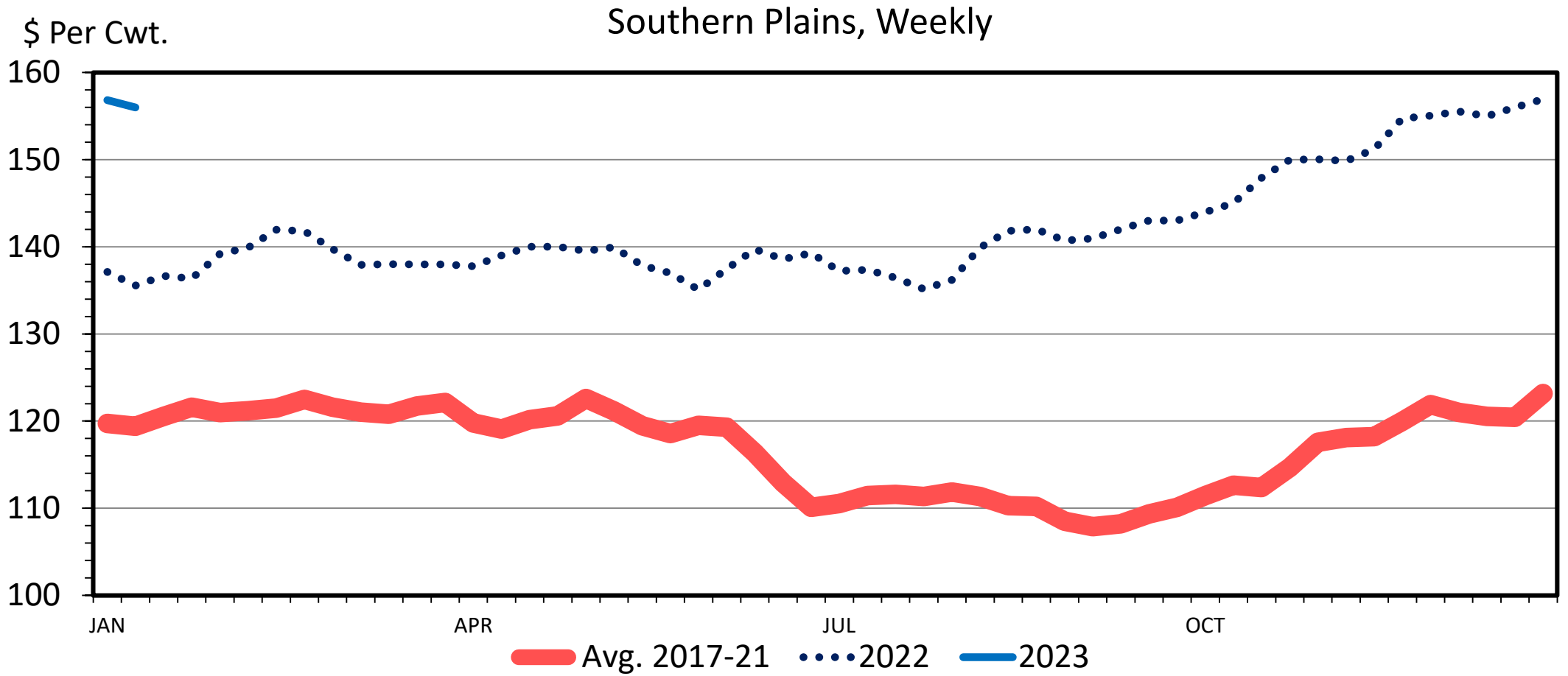


Data Source: USDA-NASS

Livestock Marketing Information Center

TEXAS A&M AGRILIFE EXTENSION

Slaughter Steer Prices



Data Source: USDA-AMS

Livestock Marketing Information Center

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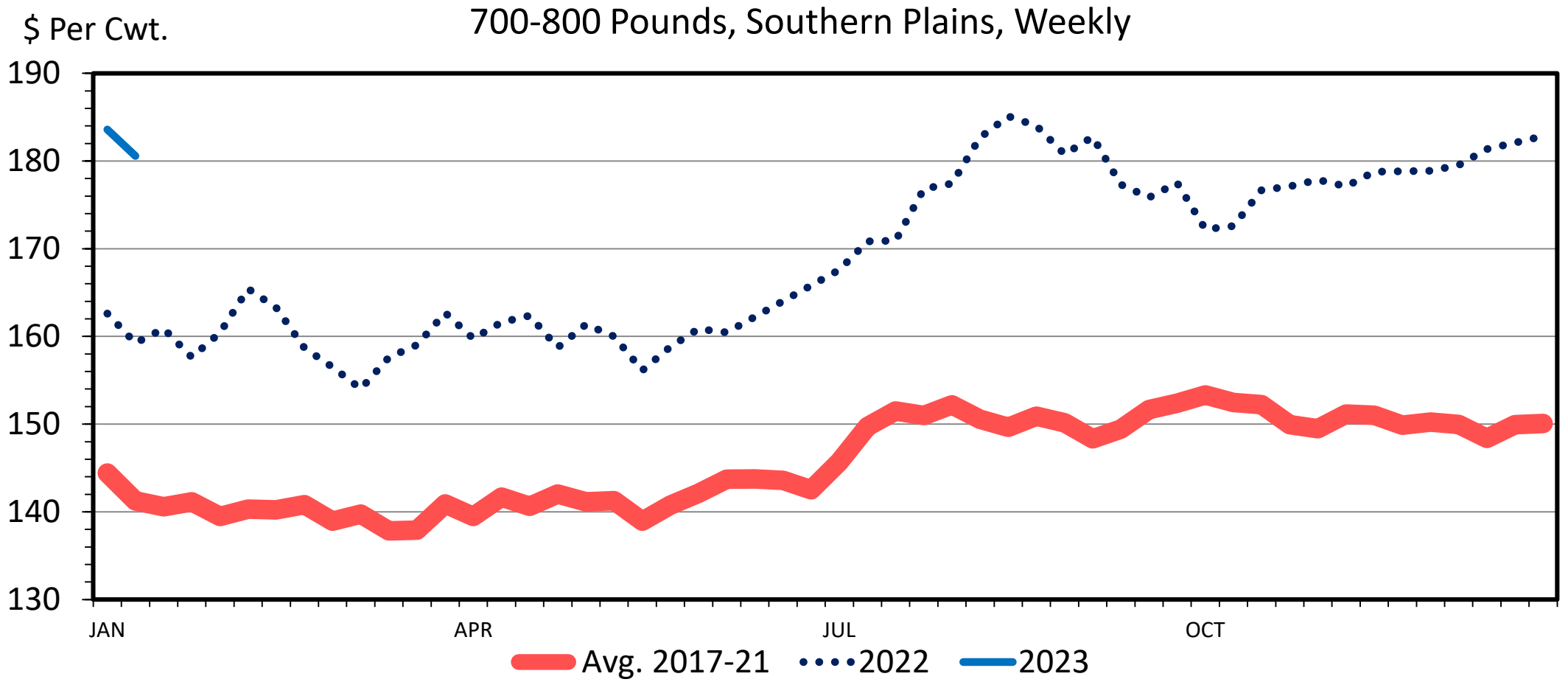
Med. & Lrg. #1 Steer Calf Prices



Data Source: USDA-AMS

Livestock Marketing Information Center

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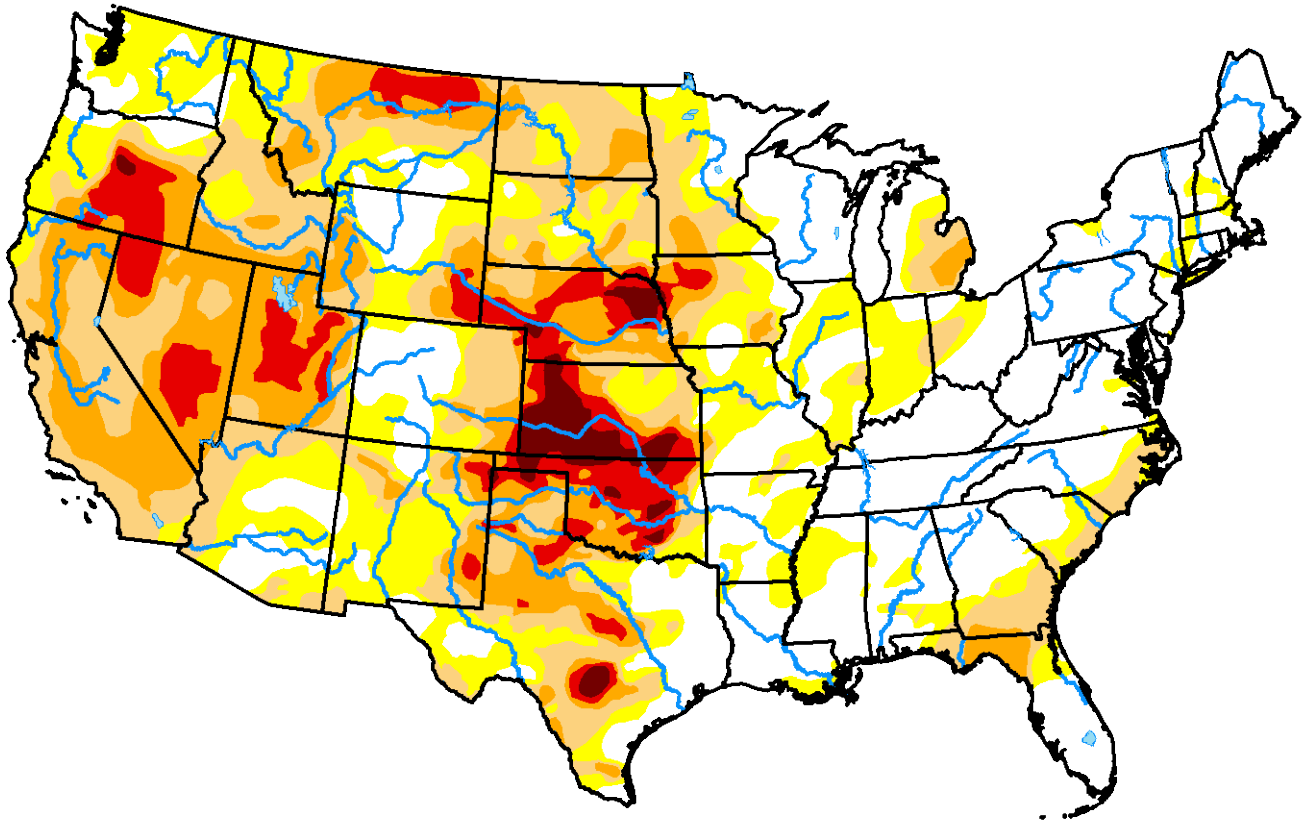
Cattle Market - Takeaways

- Expect increasing prices toward record levels; both cyclically and through the duration of the drought and for a year to two after the drought breaks
- Inputs remain high; more expensive hay and feed grains
- Potentially additional price support if new harvest facilities open

Rebuilding the Herd (?)

U.S. Drought Monitor



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

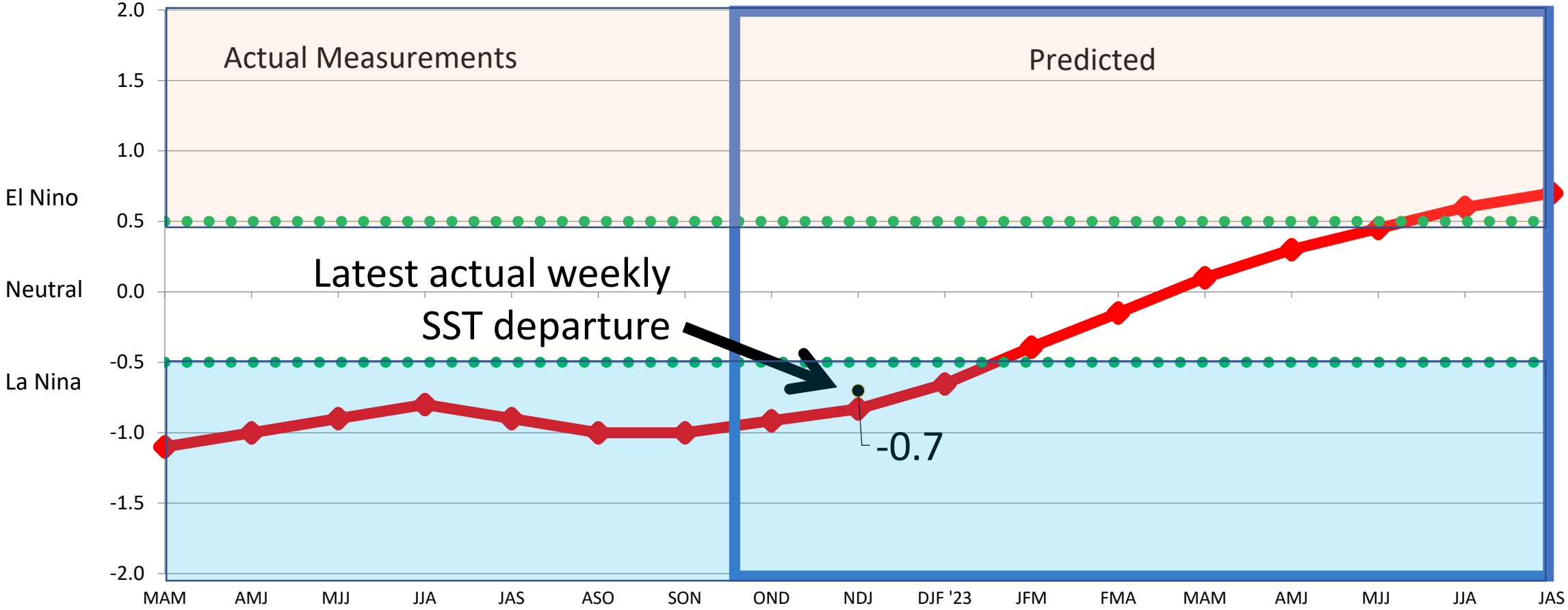
Author:

Richard Tinker
CPC/NOAA/NWS/NCEP

Data Source: U.S. Drought Monitor, January 10, 2023

Oceanic Niño Index (ONI)
ENSO Alert System Status: La Niña Advisory

ENSO Alert System Status: La Nina Advisory--La Nina is present.
The CPC/IRI Probabilistic ENSO Outlook: La Nina is expected to persist into the Northern Hemisphere winter 2022-23 and then transition to ENSO-neutral in January-March 2023.



El Niño/Southern Oscillation (ENSO) Diagnostic Discussion, January 3, 2023
http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/
Australian Bureau of Meteorology, http://www.bom.gov.au/climate/enso/

TEXAS A&M AGRILIFE EXTENSION

Recent Replacement Prices

Forecast Annual Cow Costs/Calf Prices							
	2023	2024	2025	2026	2027	2028	2029
Cost/AU	$750	$760	$770	$780	$790	$800	$810
Calf Price/CWT	$215	$225	$230	$230	$225	$220	$210

Final Week 2022 BRED COWS MED & LG. 1						
AGE	**STAGE**	**AVG WT.**	**AVG. PRICE. ($/HEAD)**	**# CALVES**	**NPV**	**Approx. BE Bid**
2-4	T2	980	$ 1064.8	6	$82	$1,150
2-4	T3	1115	$ 1425.00	6	-$264	$1,150
5-8	T2	1434	$ 1335.02	4	$65	$1,403
5-8	***T2***	***1434***	***$1335.02***	***3***	***-$109***	***$1,287***
> 8	T2	1367	$ 959.85	2	-$83	$870
> 8	T3	1390	$ 1025.00	2	-$144	$870

Considerations for Rebuild Math

- Remember, genetics certainly have value, but pounds are what pay and a high rate of live, weaned calf is by far the most important indicator of profitability on an operation

- In an accounting sense, you hope that cow does directly pay her own bills, but in reality, a negative NPV is a burden (increase in operating cost) across ***all*** your cows

- Depending on your purchase strategy, you might consider this math in a 'dollar cost averaging sense'; i.e. expensive cows are the cost of doing business and over time ***you have a plan*** to account for those increased operating expenses

Options and the Bid Price Calculator

- Find the best ROI for your base asset (stockers, heifer retention and sale, heifer regrowth, cow purchase, pasture rest, etc?)
- https://agecoext.tamu.edu/ → Resources → Decision aids → Beef Cattle Decision Aids
- Spreadsheet tool allows for input of personal data, bid price estimation, manipulation of expectations, etc.

Bid Price for Beef Cows Including Financing Implications

Purchase bred - lease rate as grazing cost Rolling Plains of West TX				Date Printed	4-Jan-23		
Steer Weight - Lb.	550						Net Present Value/Hd.*
Heifer Weight - Lb.	500		Discount Rate		7.00 %		($0.63)
Cull Cow Sale Weight - Lb.	1,100						
Cow Bid Price ($/Head)	$1,135					Bid--->	$1,135
Expected Number of Calving Opportunities - Years	3						Bid Too High
Year	2023	2024	2025				
	Year 1	Year 2	Year 3				
Calf Crop or Weaning %	100	88	88	88	88	88	88
Steers Price ($/Cwt)	$191	$194	$197	$202	$204	$201	$196
Heifer Price ($/Cwt)	$171	$174	$177	$182	$184	$181	$176
Cull Cow Price ($/Cwt)	$76	$77	$78	$80	$81	$79	$76
Gross Receipts (Calf Sales)	$951	$854	$868	$891	$899	$883	$864
See Sheet 2. Cow Operating Cost/Year	$739	$739	$752	$767	$778	$783	$789
Net Above Operating Cost	$212	$115	$116	$0	$0	$0	$0

Growing Live Cattle Demand in West Texas

Producer Owned Beef (POB)

- Facility in Amarillo slated to harvest 3,000 head/day beginning in 2025, totaling roughly 700,000 head new harvest capacity annually – this is in ADDITION to the cows and calves that must be replenished post-drought

- Pre-COVID, annual cattle harvest totaled 3.5 to 4 million head annually – roughly equal to the number of cattle marketed in the same region on an annual basis

- New facility will induce roughly 20% change in live cattle demand when it comes online, with sourcing of live cattle for harvest averaging 135 miles*, creating a demand for some increase in cattle feeding capacity and/or cattle on feed in existing infrastructure

***Data Source: National Beef Quality Audit-2016: Transportation, mobility, and harvest-floor assessments of targeted characteristics that affect quality and value of cattle, carcasses, and by-products**

POB, Cattle Expansion, and Water Use

- POB estimated use = 700 gal/head/day * 700,000 head = 489 m. gal/year (~1,500 AcFt)

- Increase Direct Fed Cattle Water Use = 12.5 gal/head/day * 700,000 * 180 days = 1.57 B. gal/year (~4,800 AcFt)

- New Feed Demand = 21.5 lbs feed/day * 180 days * 700,000 head = 2.7 B. lbs feed annually
  - Growth in feed demand is certainly important, but change in local feed production might already be limited by water with marginal changes where irrigated production sees an extension in profitability

Thanks!

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