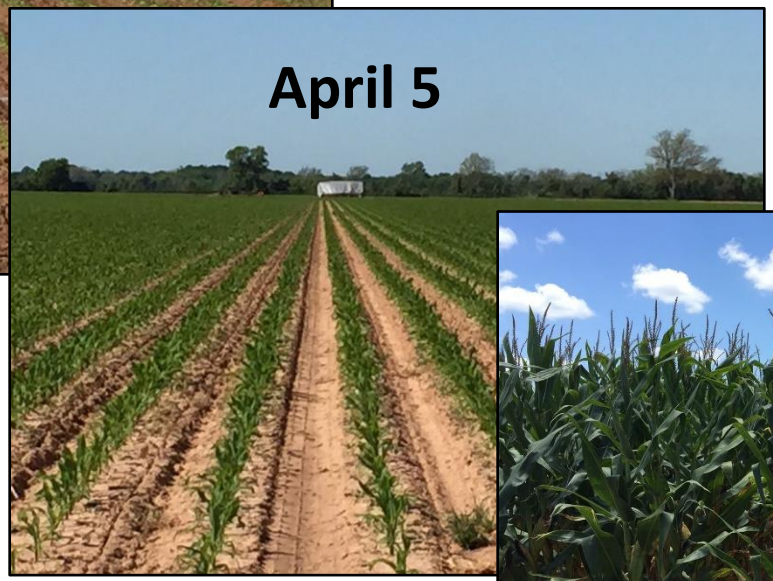
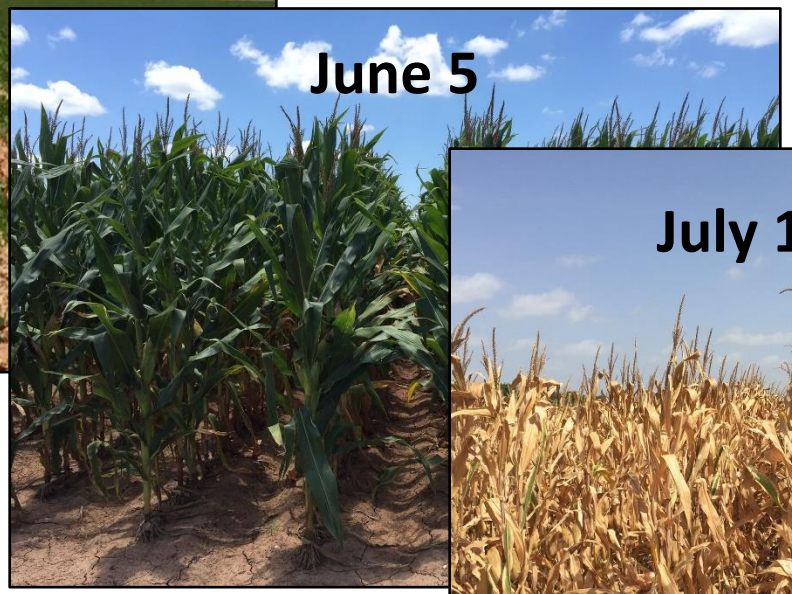
Seasonality





Mark Welch

Grain Marketing Economist

Texas A&M AgriLife Extension Service

TEXAS A&M AGRILIFE EXTENSION

Seasonal Price Patterns

- Cash Seasonals
  - Supply and demand based
    - Calves - Weaning, grazing
    - Crops - Harvest
  - Can you modify production plans to take advantage?
- Contract Seasonals
  - Eventually tied to cash market
  - Tied to events that may affect supply and demand
  - Expands marketing opportunities
- Seasonal Price Patterns
  - Outputs
  - Inputs

Definitions

- **Seasonality**
  - **Price variation caused by market *uncertainty* associated with normal physiological or fundamental effects such as planting, critical growing stage, harvest, supply and demand conditions, and holidays**
  - **Provides additional information to compliment traditional fundamental and technical analysis**
- **Syndrome or Anomaly**
  - **Price variation caused by market uncertainty associated with an unusual event such as a drought, trade disruption, BSE, etc.**

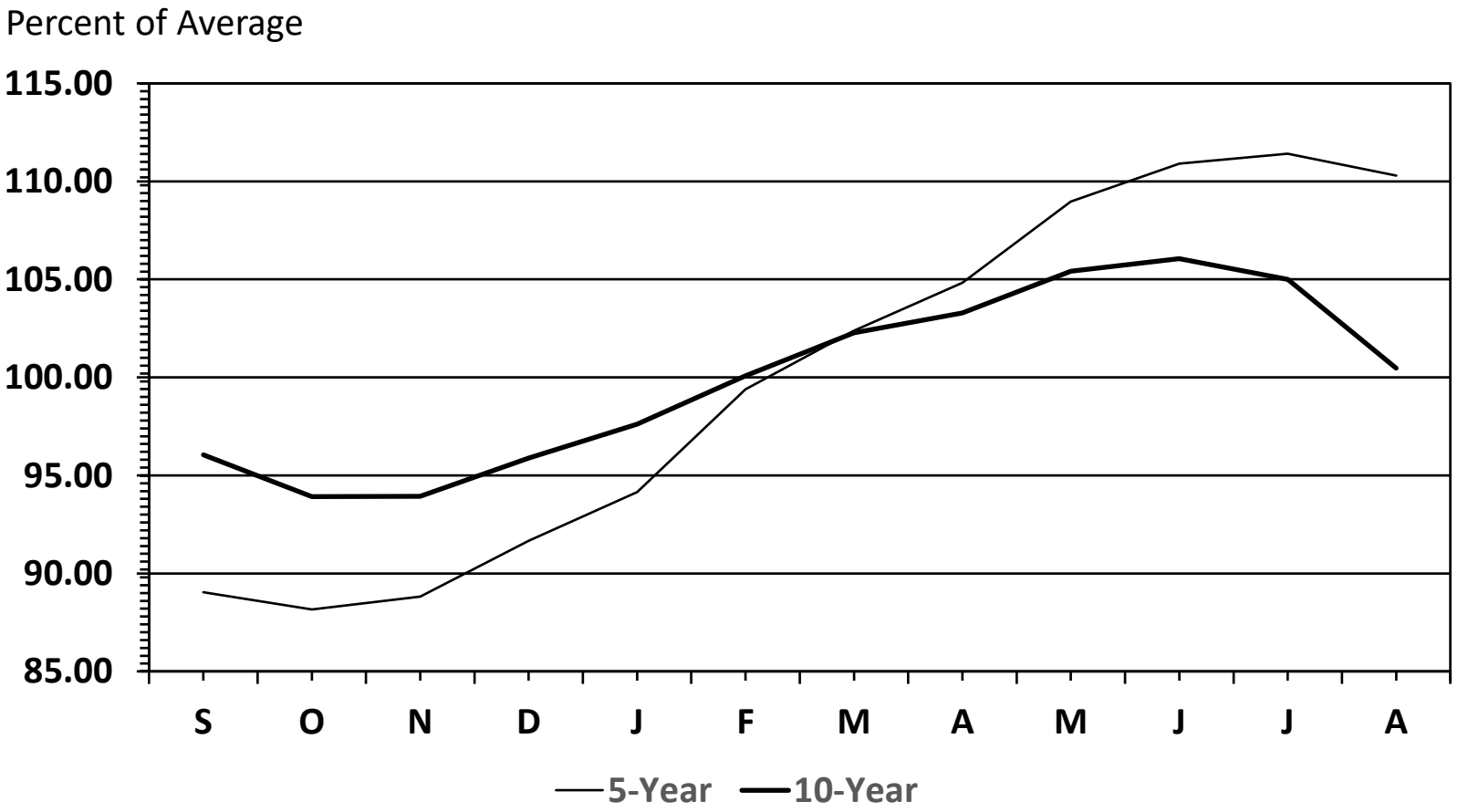
Monthly Seasonal Index
Average Percentage Method

- Calculate the annual average price for each year or season
- Divide the monthly price by that season's average to get the monthly index value
- Average all the monthly price indices for the time period of interest
- The resulting figure is the seasonal index

Seasonal Price Index for U.S. Corn

September 2012 – August 2022

Marketing Year

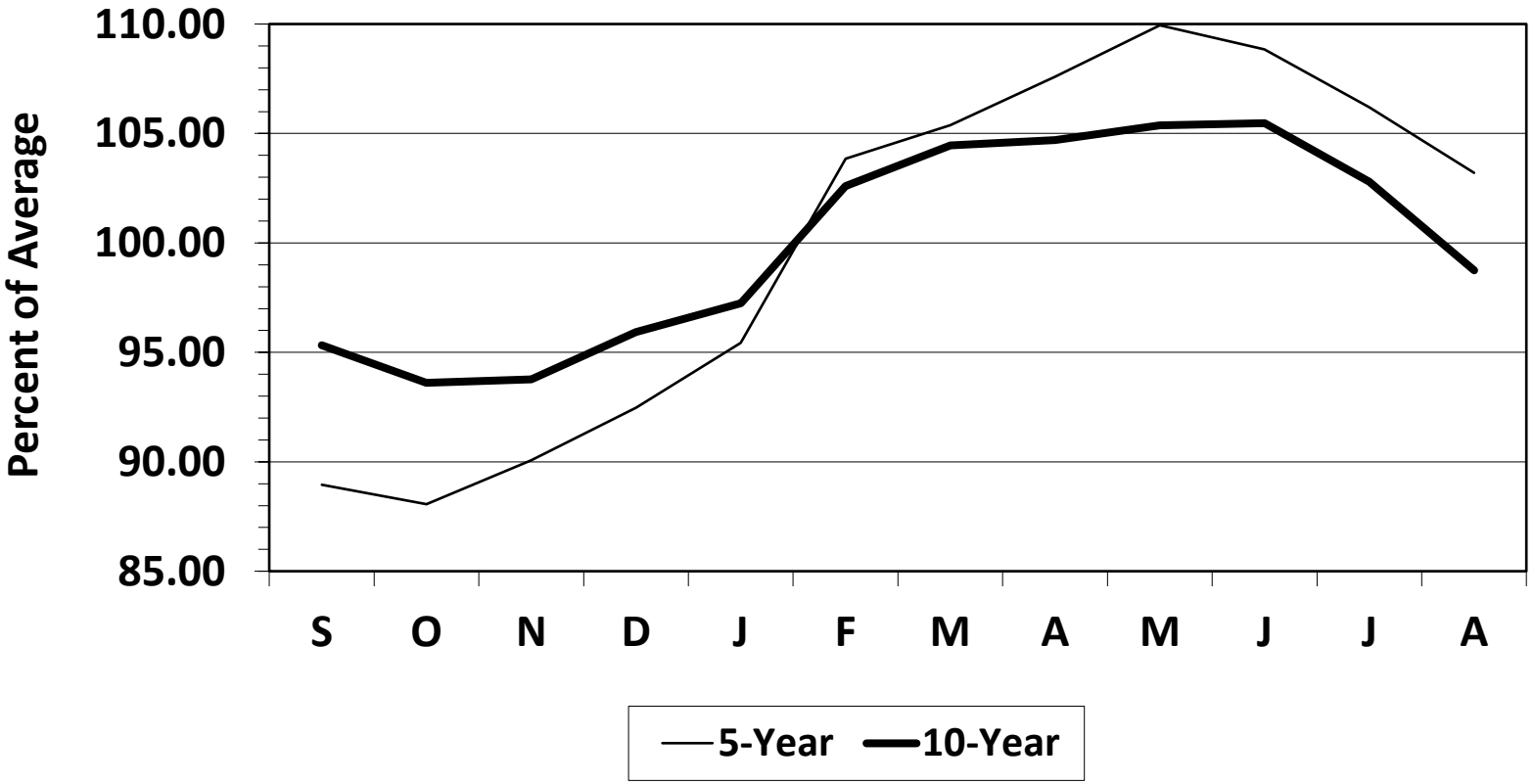


TEXAS A&M AGRILIFE EXTENSION

Seasonal Price Index for U.S. Sorghum

September 2012 – August 2022

Marketing Year



Texas A&M AgriLife Extension

Seasonal Price Index for U.S. Wheat

June 2012/13 – May 2021/22

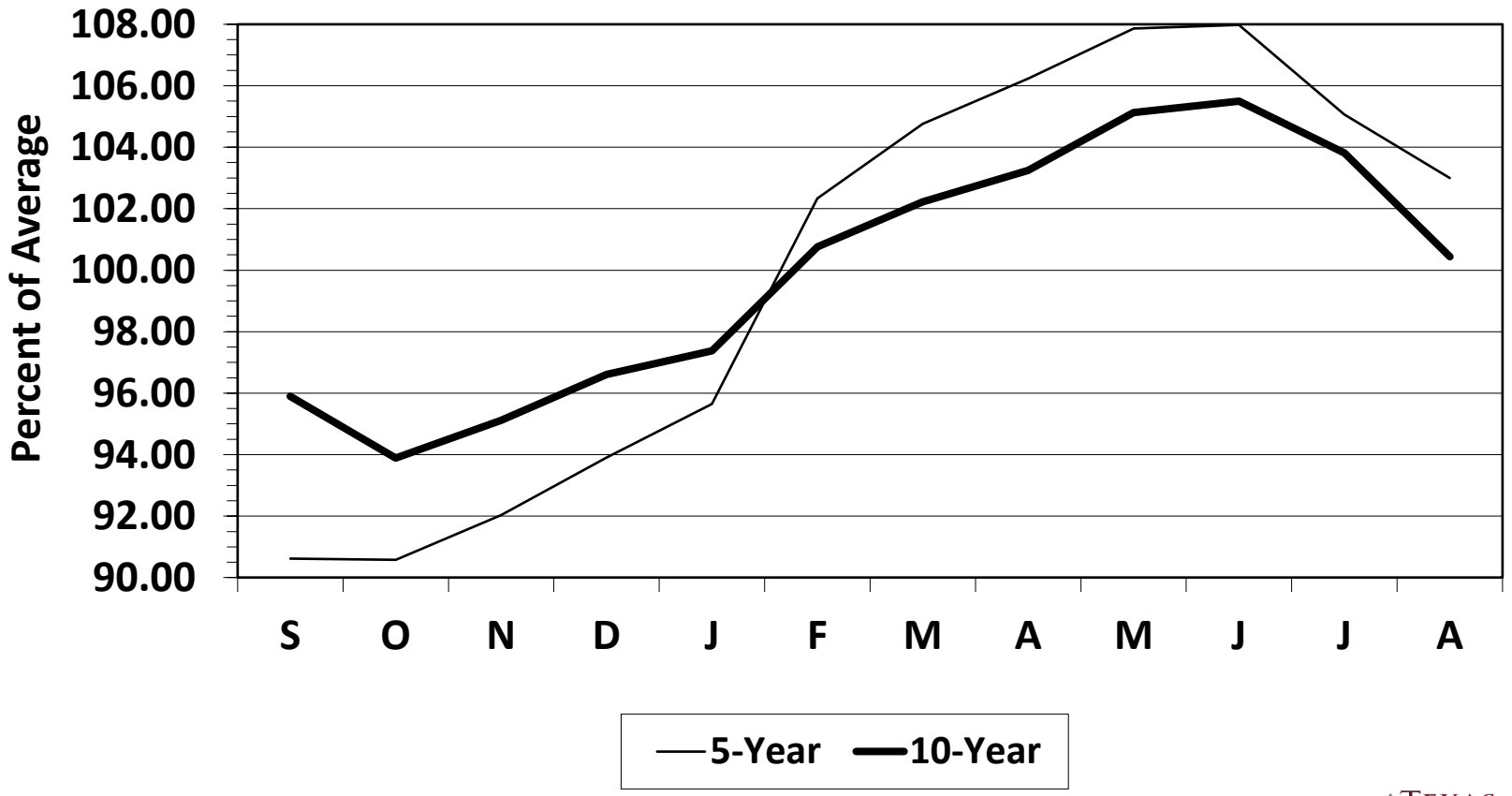
Marketing Year

TEXAS A&M AGRILIFE EXTENSION

Seasonal Price Index for U.S. Soybeans

September 2012 – August 2022

Marketing Year



TEXAS A&M AGRILIFE EXTENSION

Moore Research Center - Seasonal Price Index

- **Calculate contract high/low/range for time period of interest**
  - **2021 Dec Corn, January 1 through December 14 (exp.)**
    - **High: 636.50**
    - **Low: 430.25**
    - **Range: 206.25**

- **Determine daily index (0 to 1.00)**
  - **Price on June 1 was 577.00. The index for 6/1/21 is (price minus low)/range *(577.00-430.25)/206.25=146.75/206.25=0.71***

- **Average daily indices over years**
  - **June 1 Index 2016-2020: 0.76, 0.68, 0.82, 0.78, 0.15; 5-yr avg: 0.64**
  - **Fit the average of daily indices to a 0 to 1.00 range as above**
    - **The highest average daily index from 2016 to 2020 (5-yr index) was 0.78**
    - **The lowest average daily index value from 2013-17 was 0.15**
    - **The range of average daily index values for five years was 0.63**
    - **On June 1, the 5-year daily index value was 0.64**
    - **The 5-year Index value is 0.64-0.13/0.63=0.81**

  - ***NOTE: Most longer term indices will range from .35 to .65***

Moore Research Center – Bull/Bear Charts

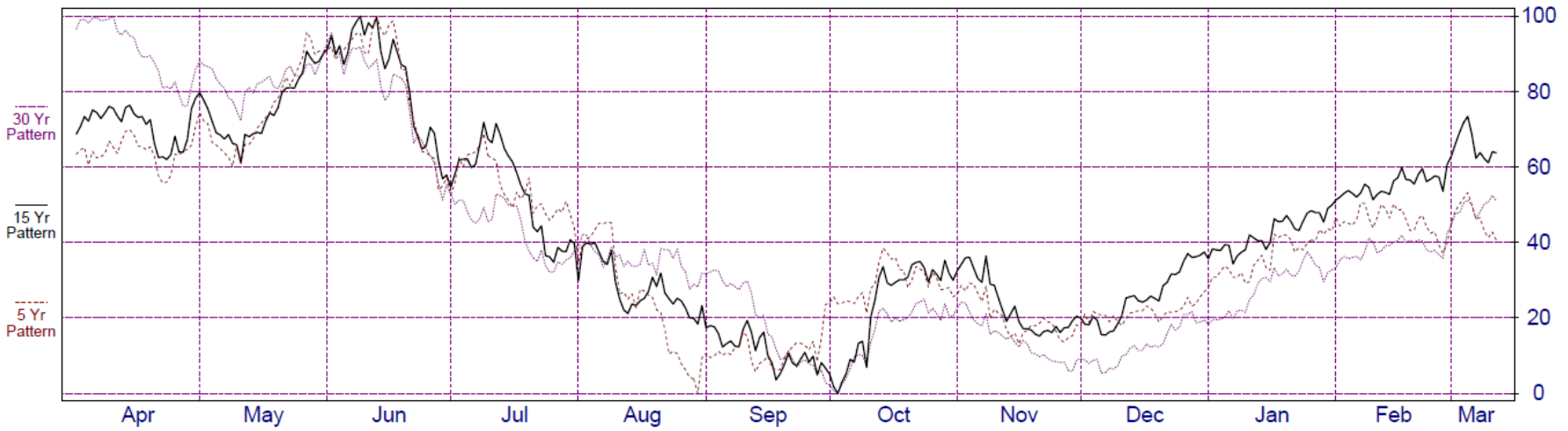
- **Each bull/bear chart consists of one composite pattern for bull years and one for bear years, years indicated in the box ('72' = 1972).**
- **Contract years are listed in order of the degree of inclination/declination of the line; most bullish of bull years listed first, most bearish of bear years listed last.**
- **To be included in the chart, the contract that year must meet a strict mathematical definition.**
- **Years with a neutral bias are not considered.**
- **Scale is not fitted to 100 to better represent the extent of typical bull or bear move.**
  - ***NOTE: Most longer term indices will range from .35 to .65***

TEXAS A&M AGRILIFE EXTENSION

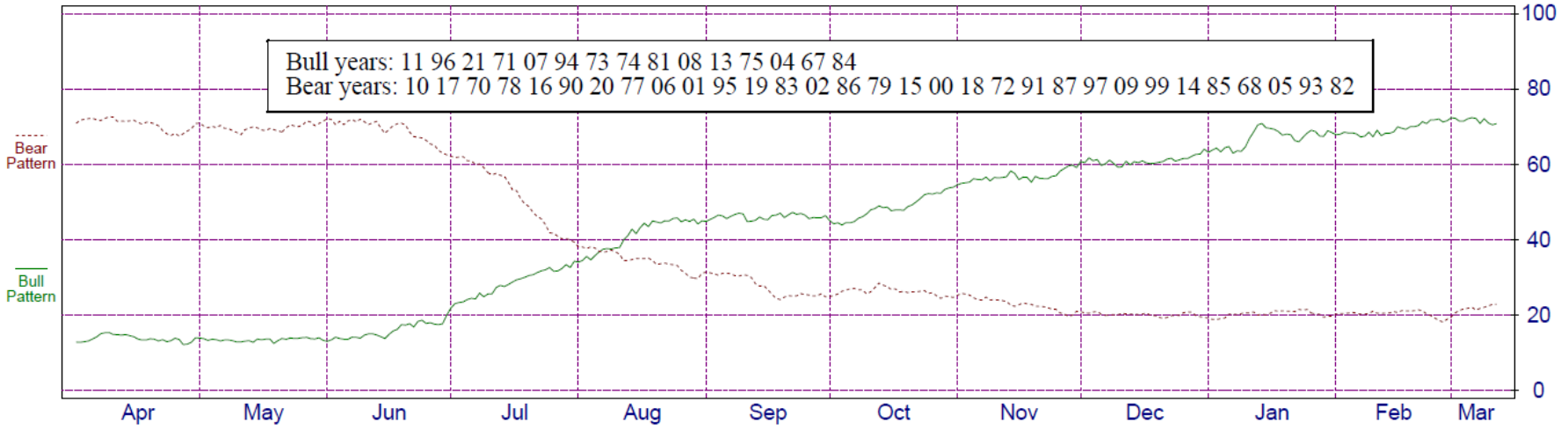
Moore Research Center, Inc.

CORN

March Corn(CBOT) Seasonal Patterns(1992-2021)



March Corn(CBOT) Bull/Bear Patterns(1967-2021)

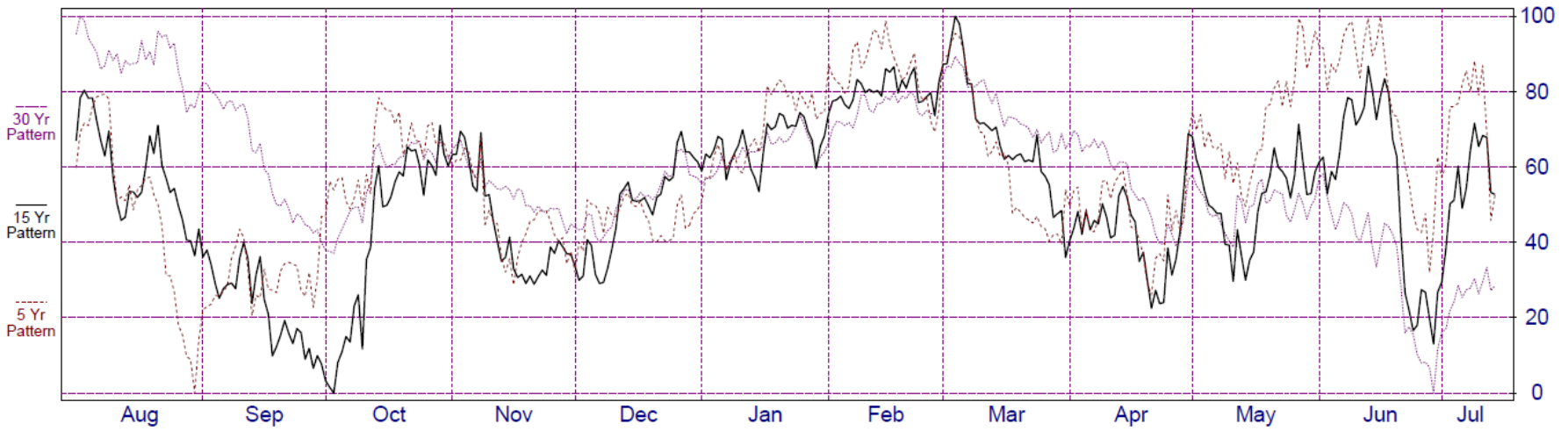


Texas A&M AgriLife Extension

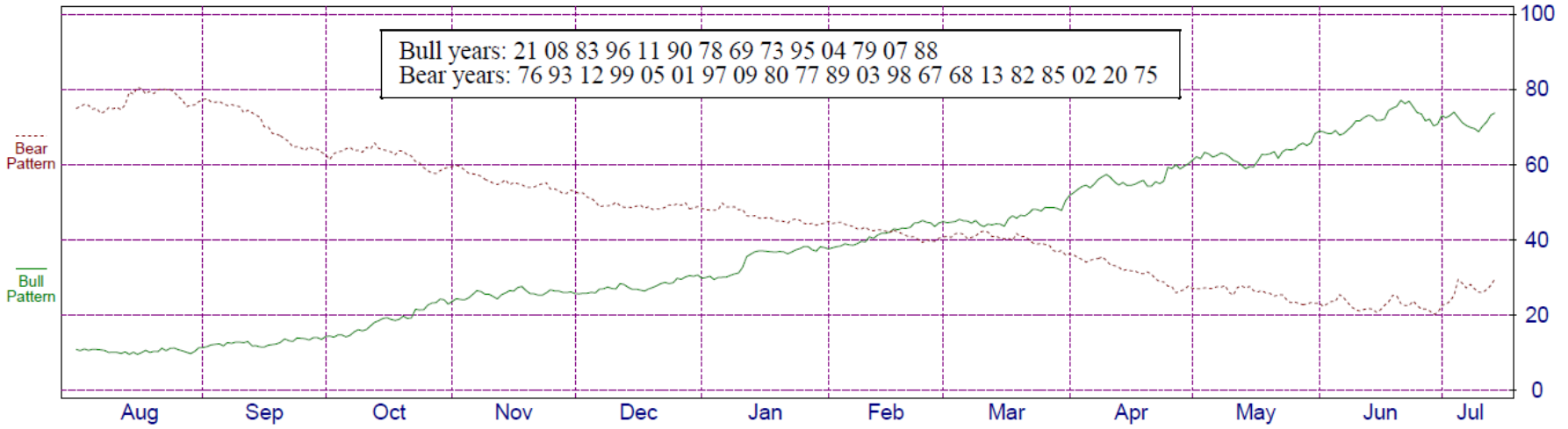
CORN

Moore Research Center, Inc.

July Corn(CBOT) Seasonal Patterns(1992-2021)



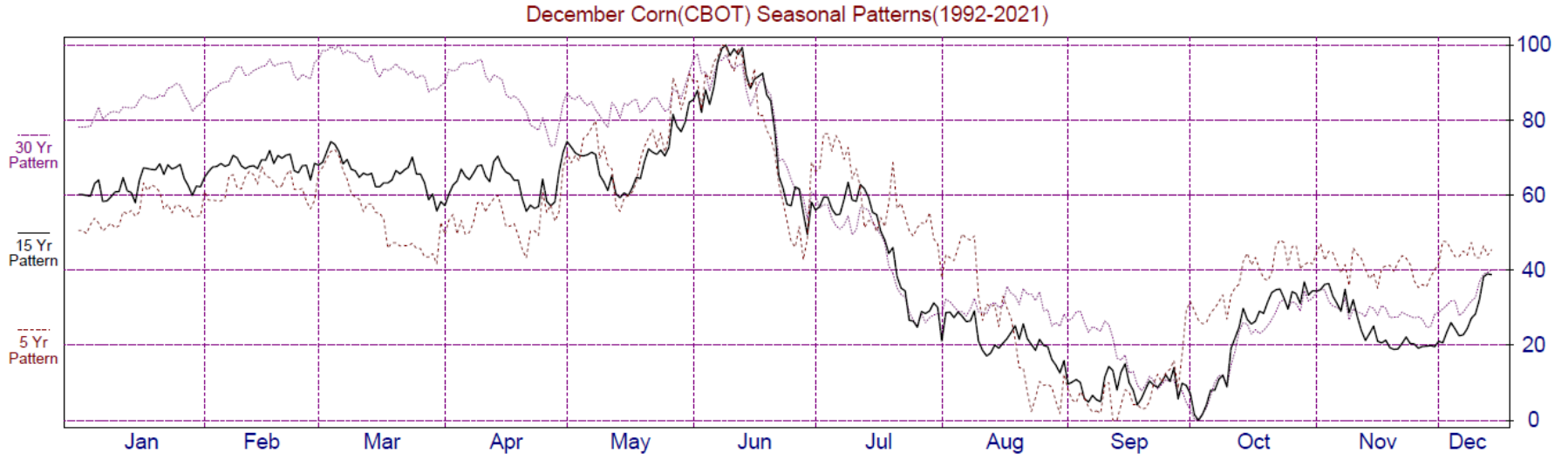
July Corn(CBOT) Bull/Bear Patterns(1967-2021)

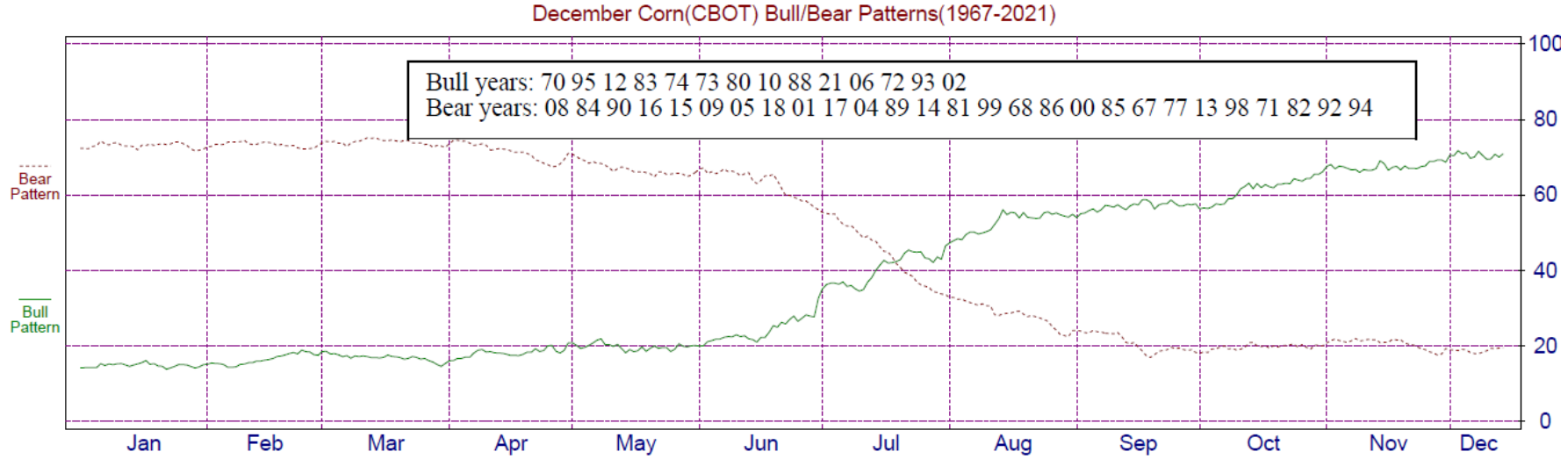


Texas A&M AgriLife Extension

Moore Research Center, Inc.

CORN





14 out of 55 were bull years: 25%

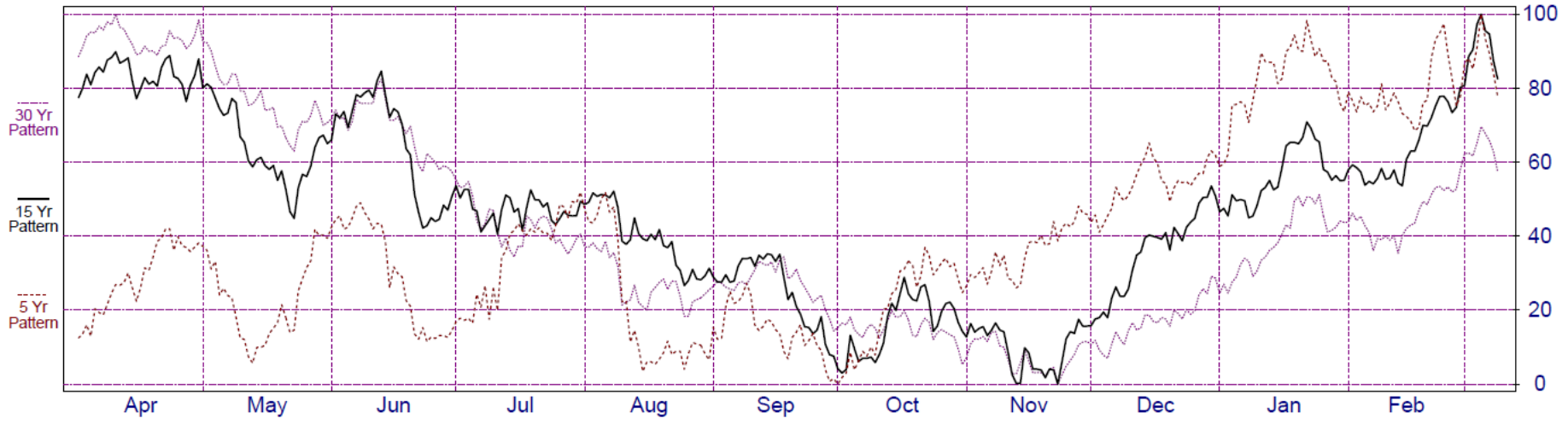
27 out of 55 were bear years: 49%

Texas A&M AgriLife Extension

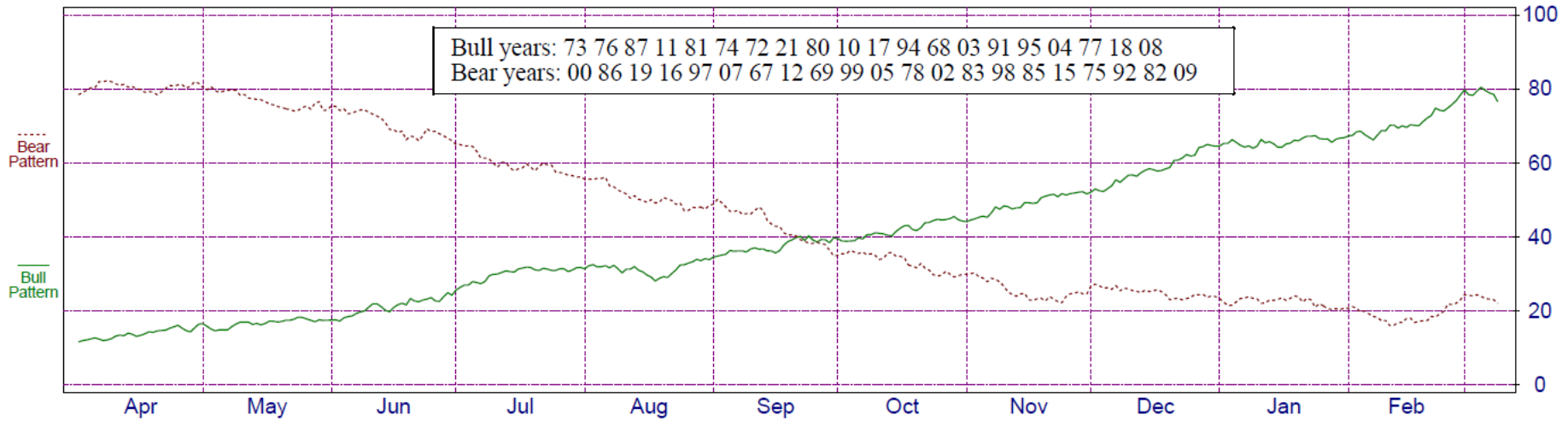
Moore Research Center, Inc.

COTTON

March Cotton(ICE) Seasonal Patterns(1992-2021)



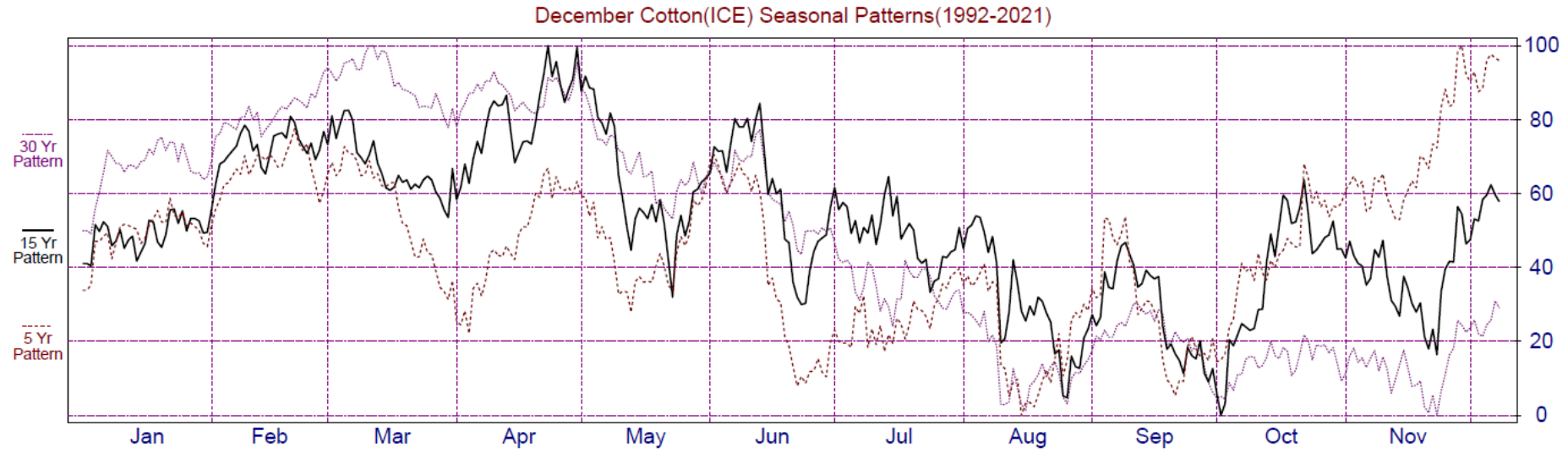
March Cotton(ICE) Bull/Bear Patterns(1967-2021)

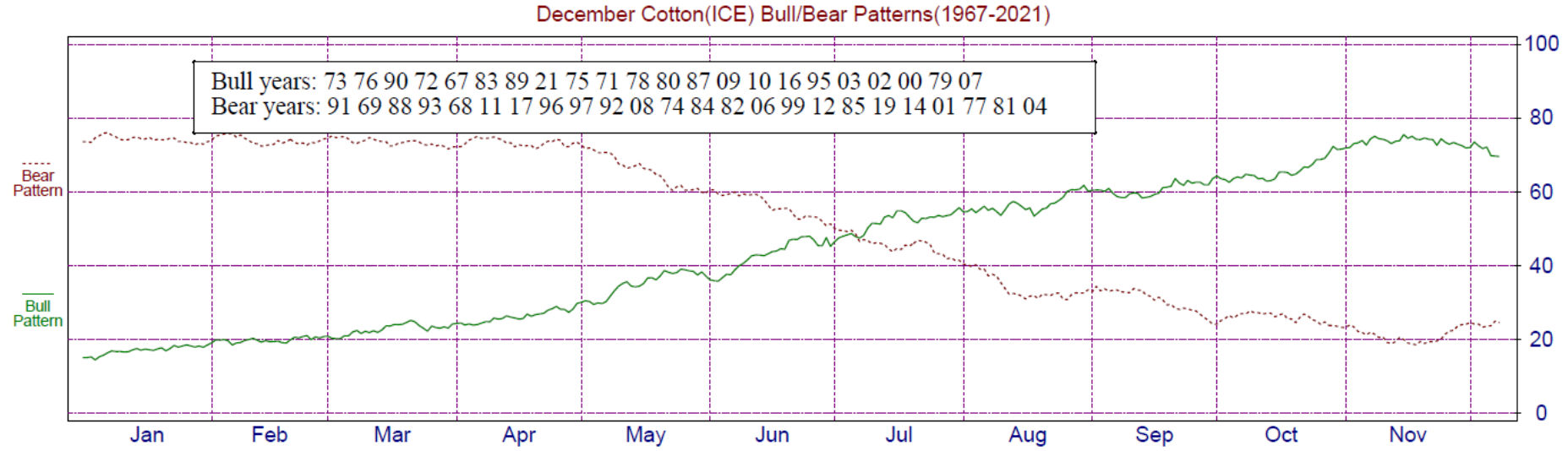


Texas A&M AgriLife Extension

Moore Research Center, Inc.

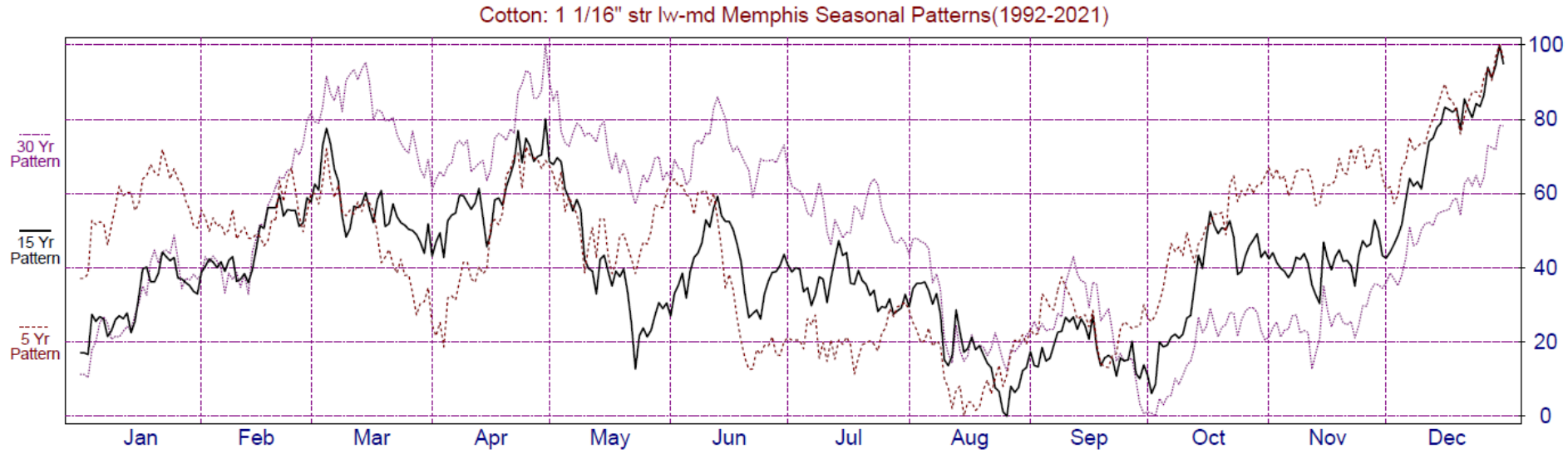
COTTON

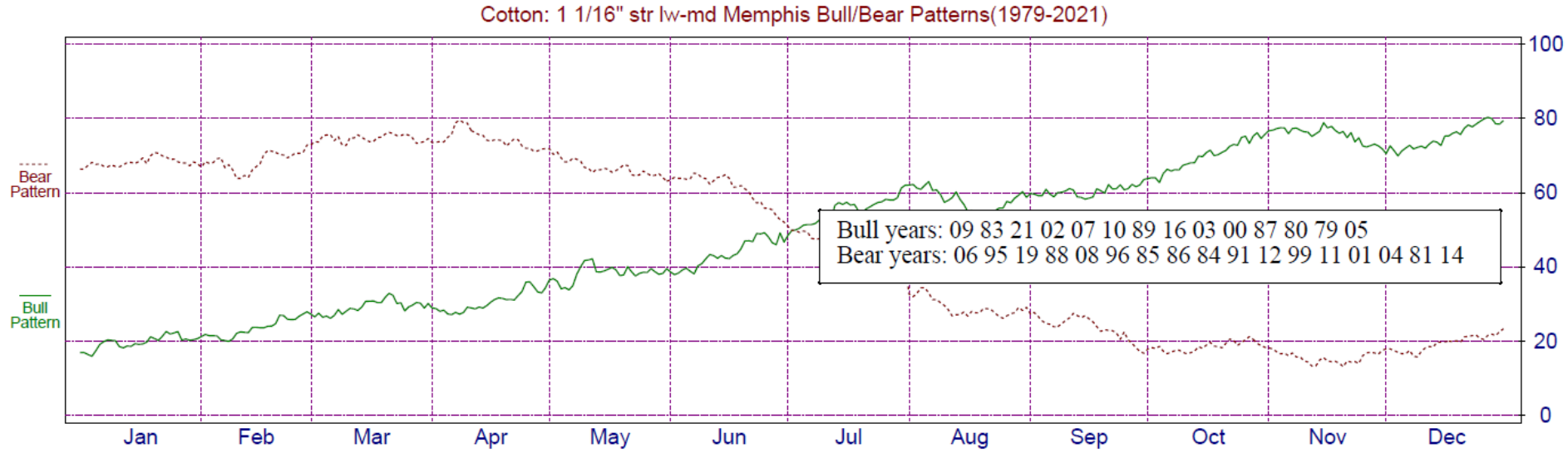




Texas A&M AgriLife Extension

CASH COTTON

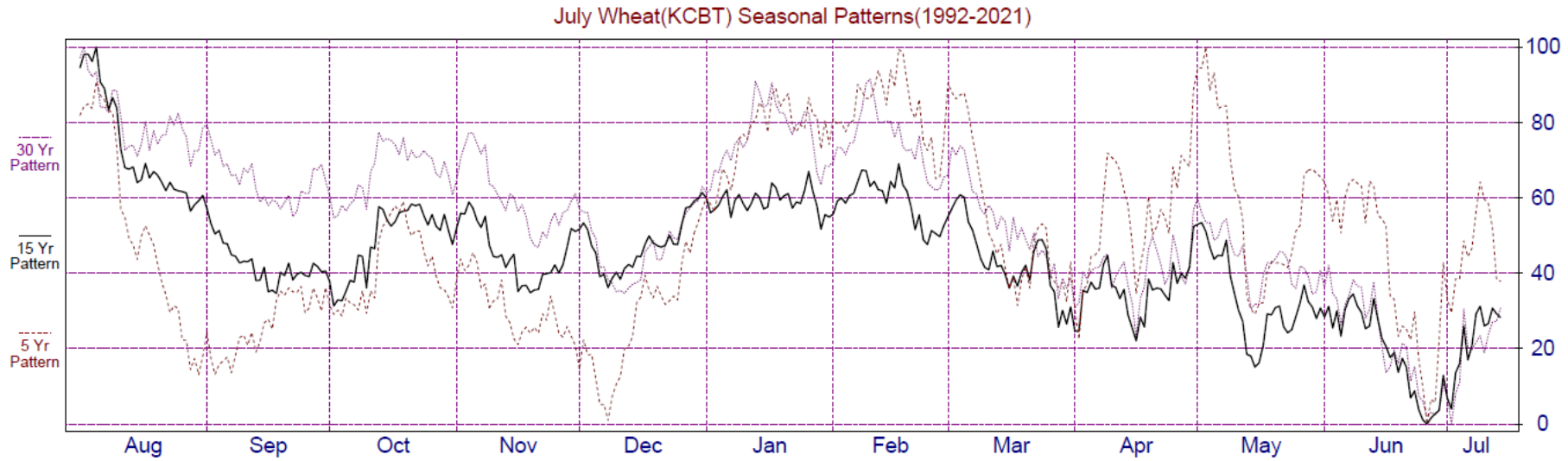


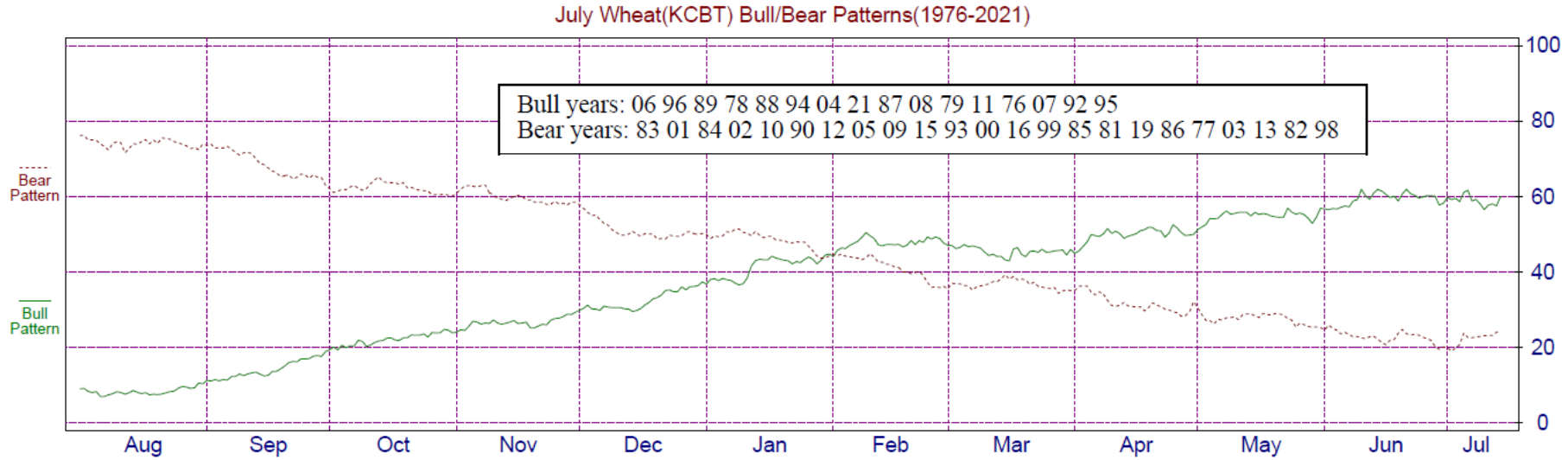


TEXAS A&M AGRILIFE EXTENSION

Moore Research Center, Inc.

KC WHEAT

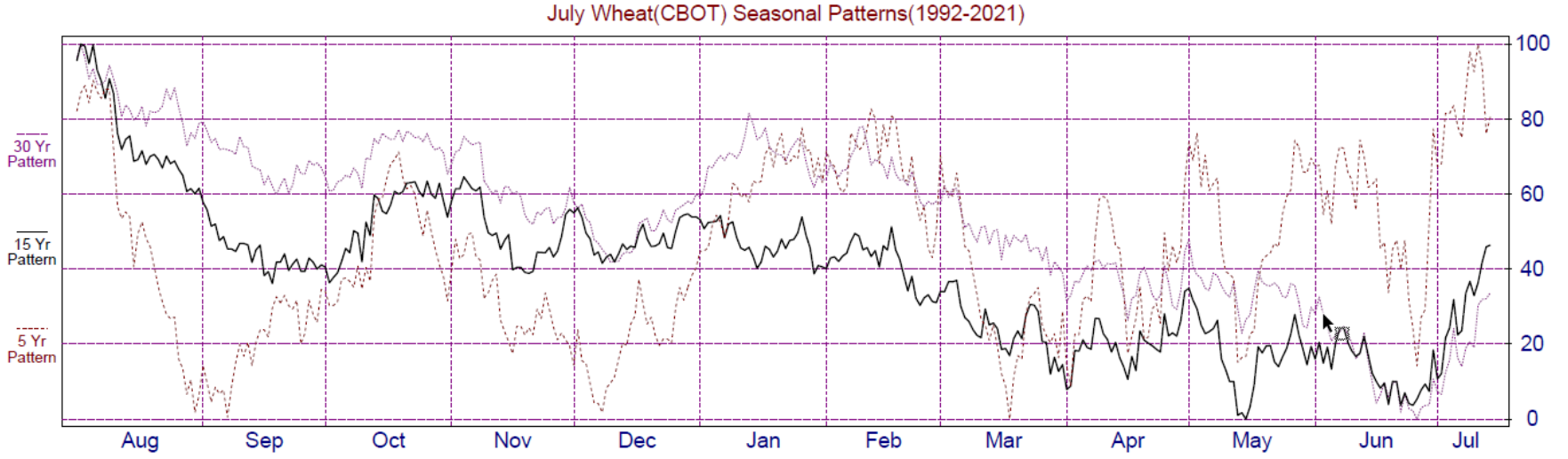


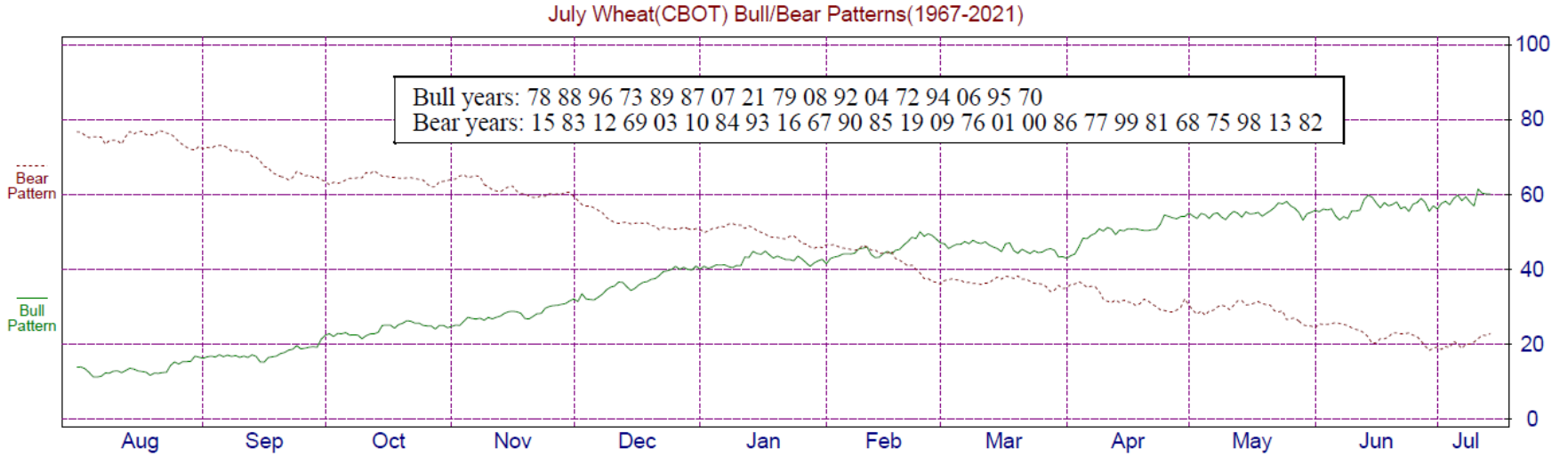


Texas A&M AgriLife Extension

CHICAGO WHEAT

Moore Research Center, Inc.



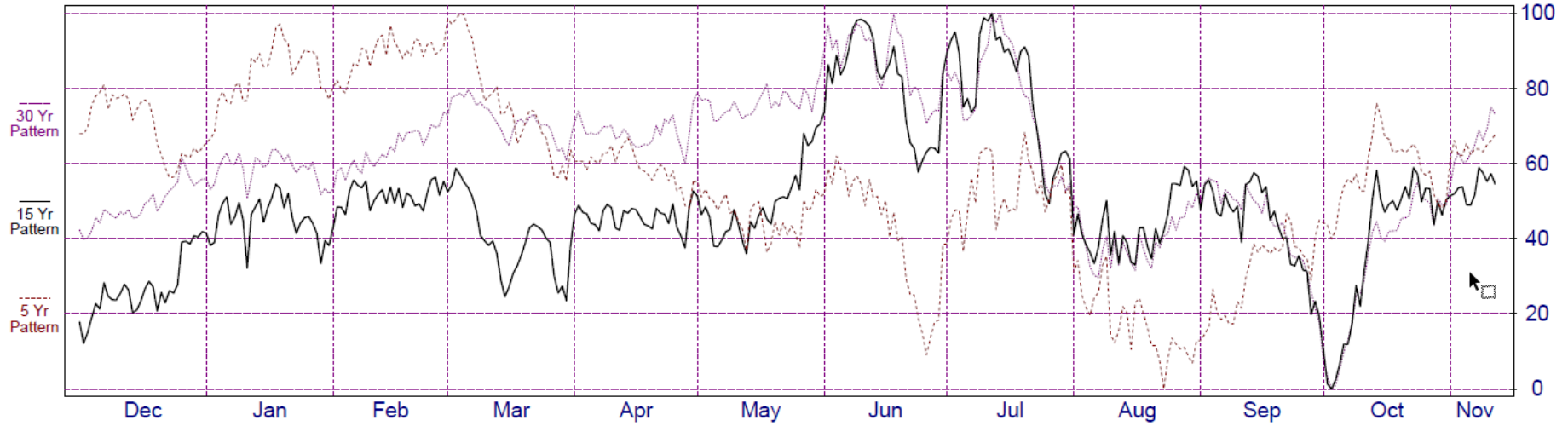


Texas A&M AgriLife Extension

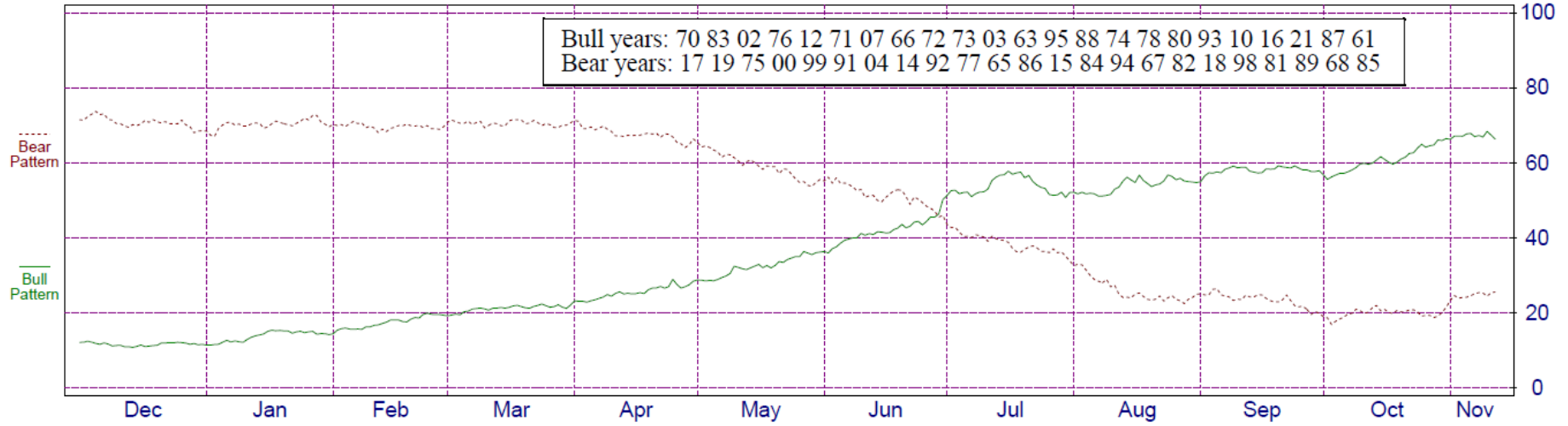
SOYBEANS

Moore Research Center, Inc.

November Soybeans(CBOT) Seasonal Patterns(1992-2021)

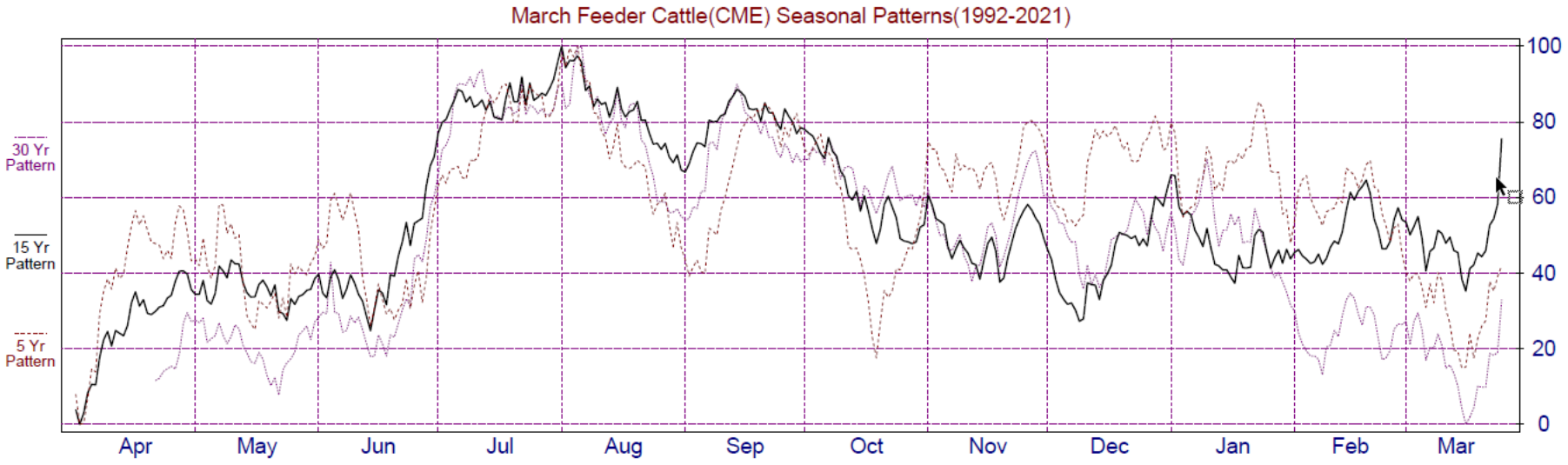


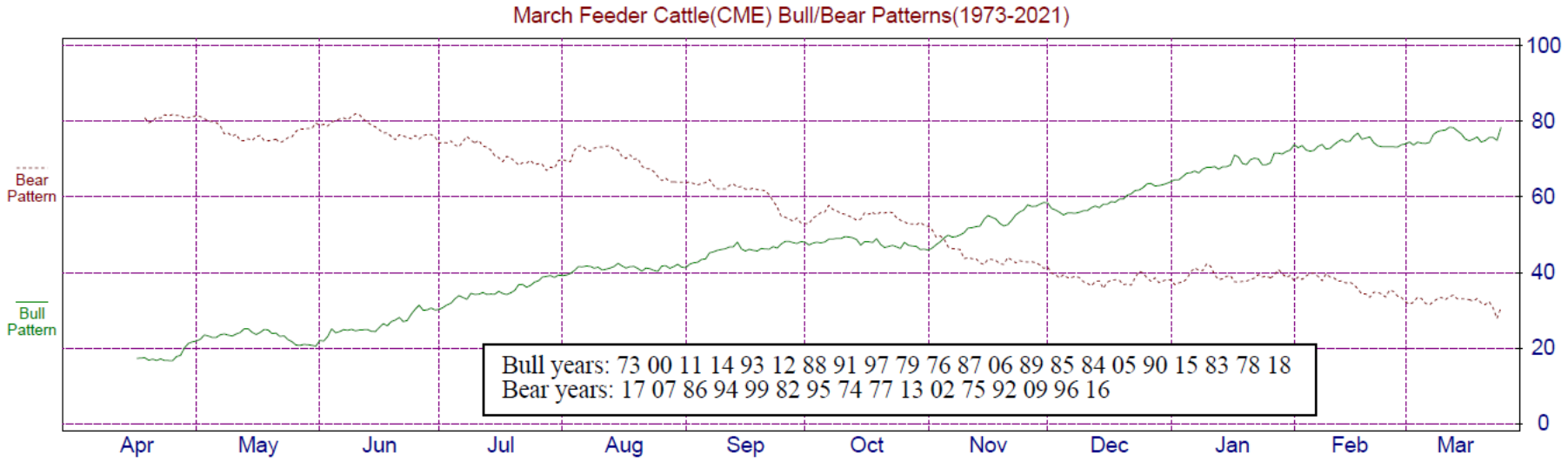
November Soybeans(CBOT) Bull/Bear Patterns(1961-2021)



Texas A&M AgriLife Extension

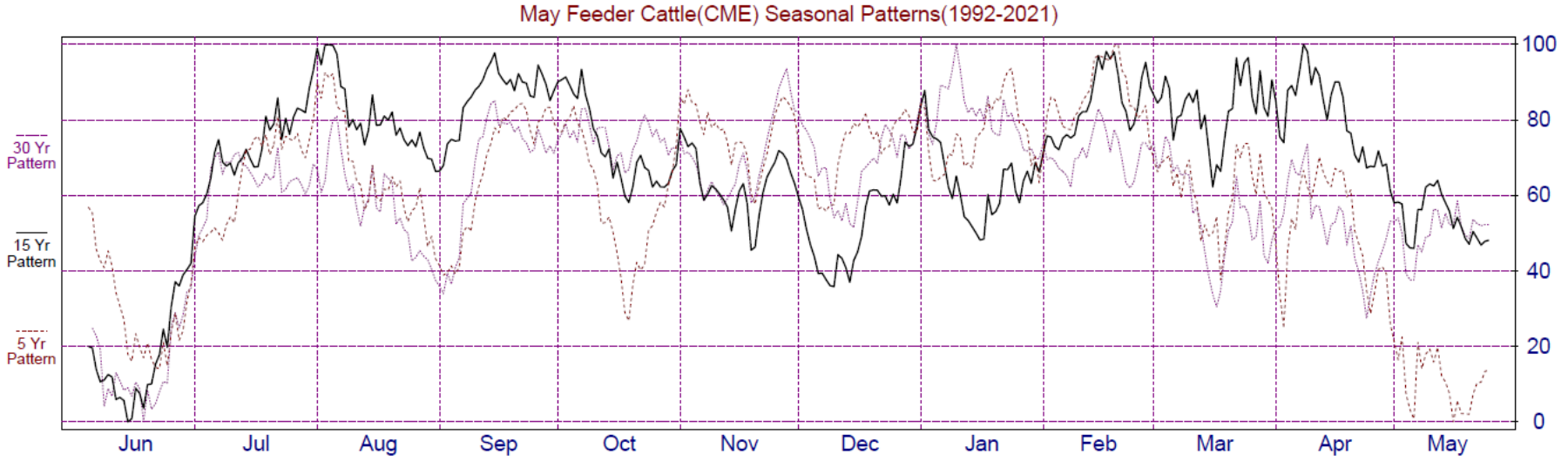
FEEDER CATTLE

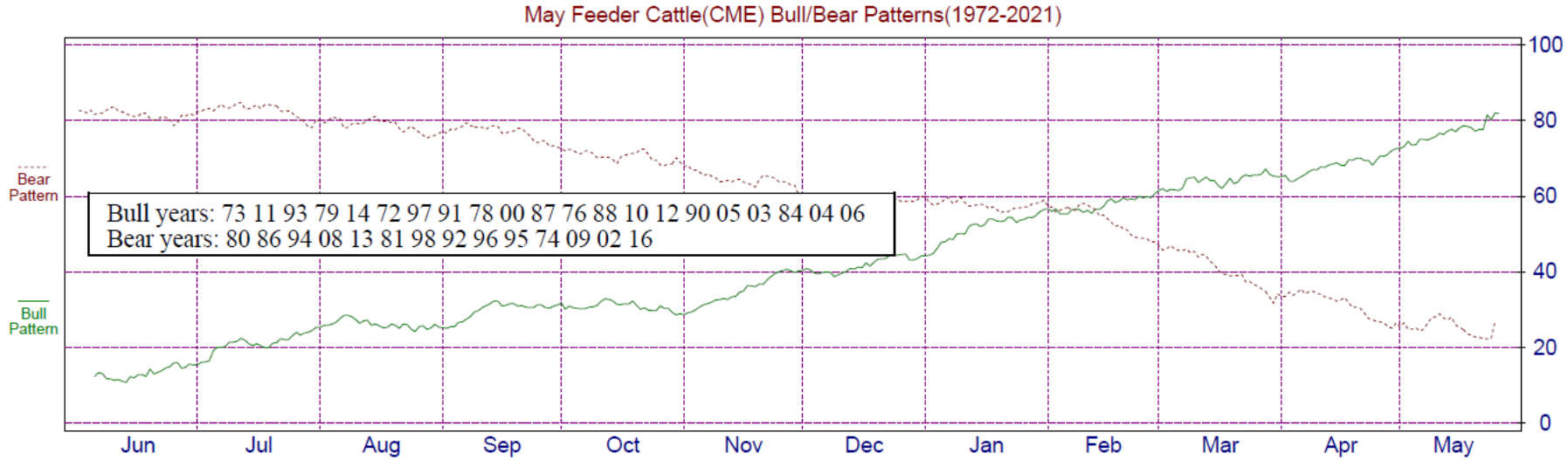




TEXAS A&M AGRILIFE EXTENSION

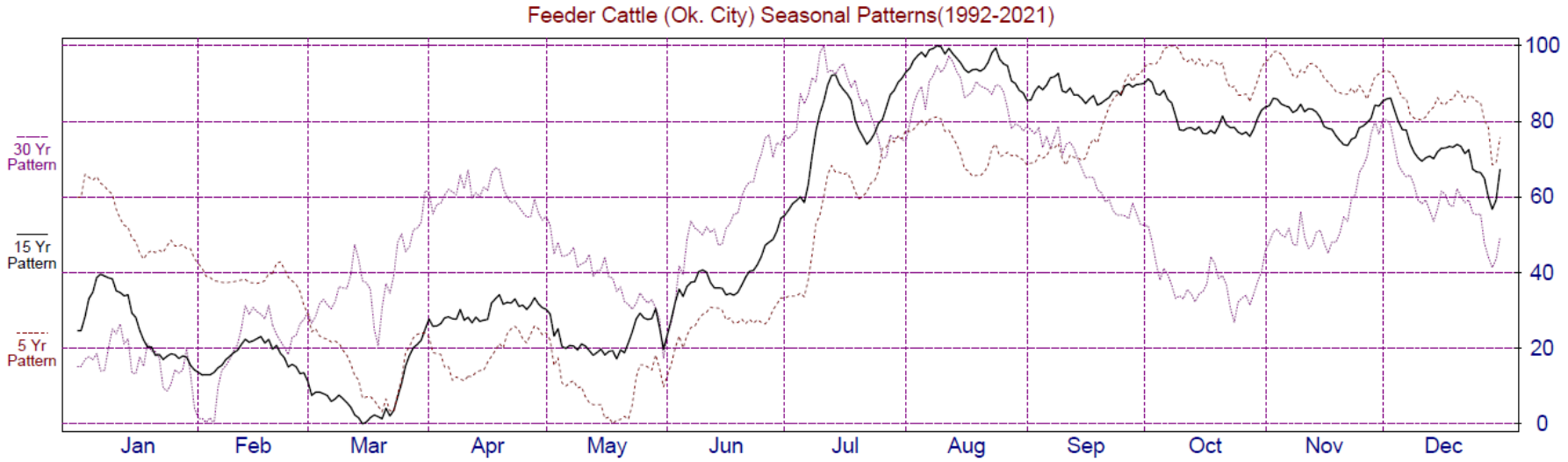
FEEDER CATTLE

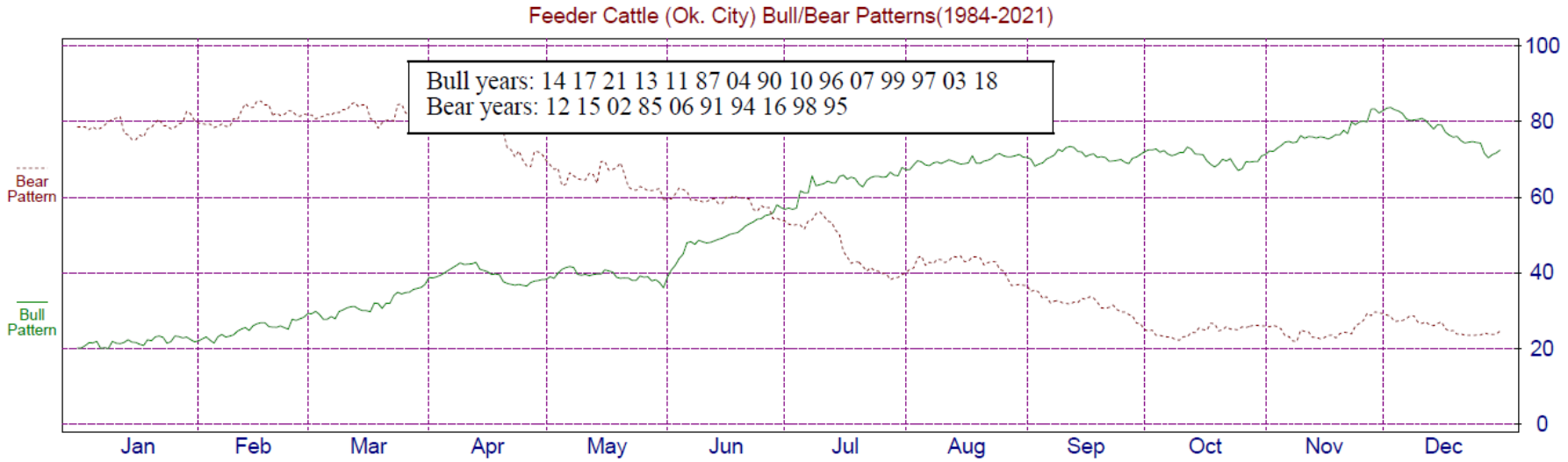




TEXAS A&M AGRILIFE EXTENSION

CASH FEEDER CATTLE



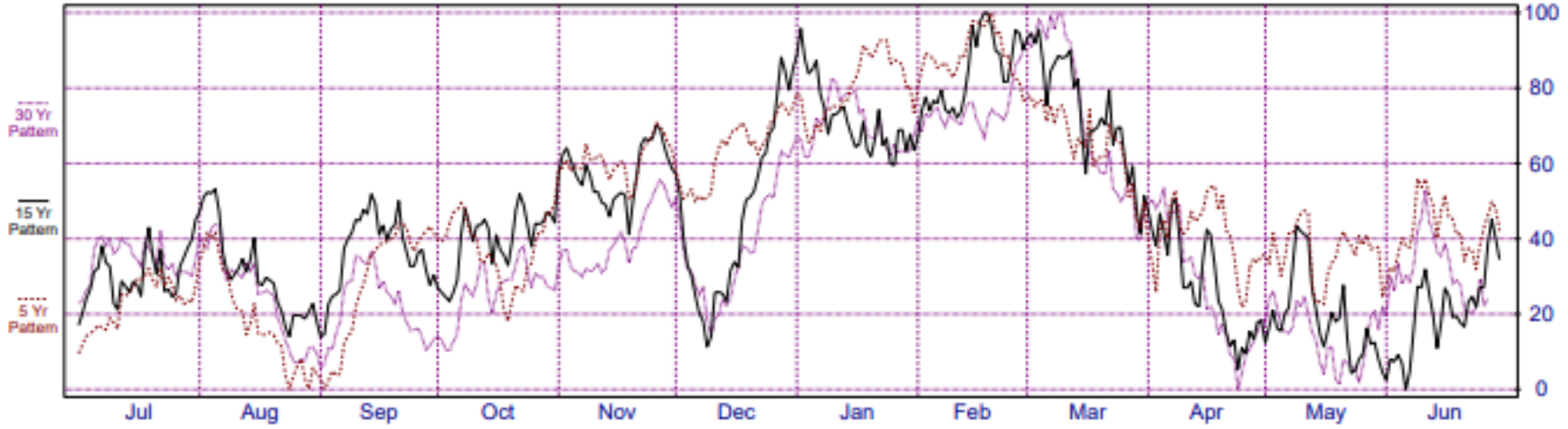


TEXAS A&M AGRILIFE EXTENSION

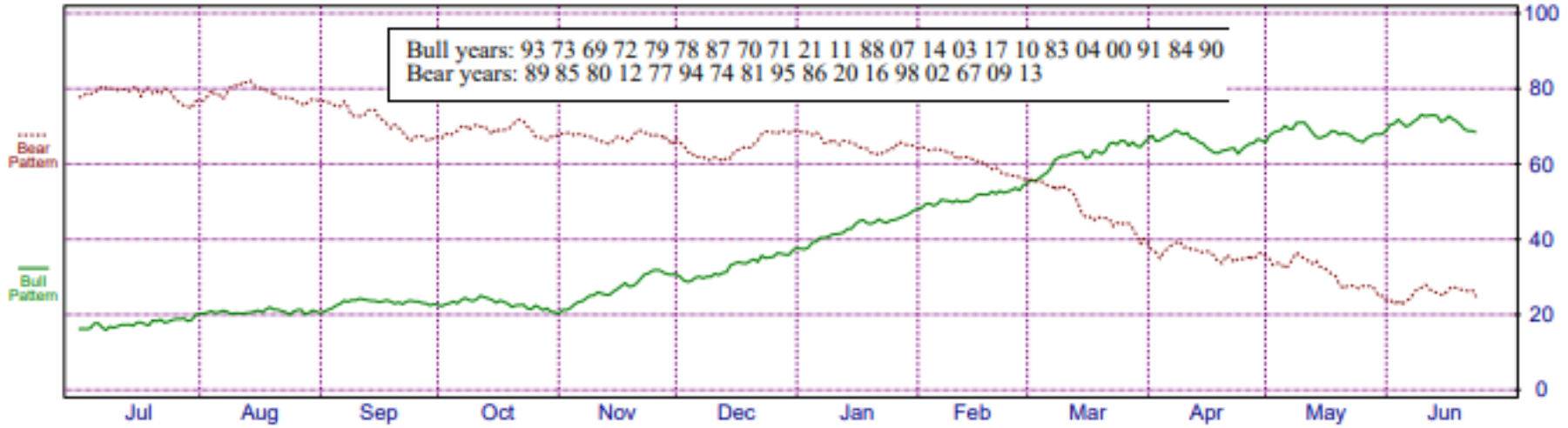
LIVE CATTLE

Moore Research Center, Inc.

June Live Cattle(CME) Seasonal Patterns(1992-2021)



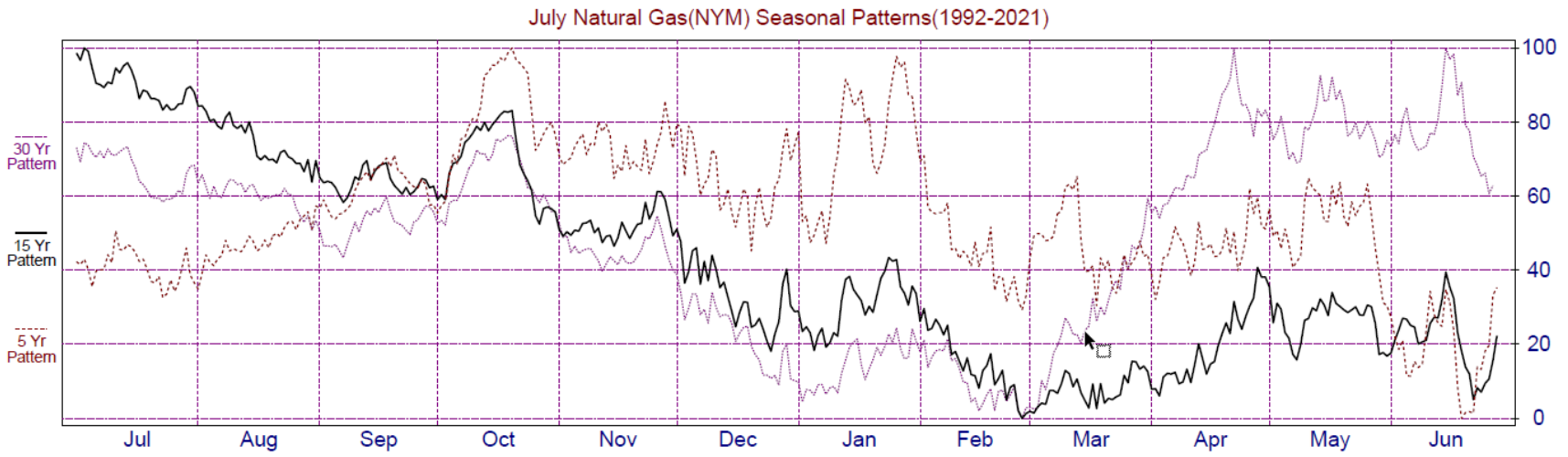
June Live Cattle(CME) Bull/Bear Patterns(1967-2021)

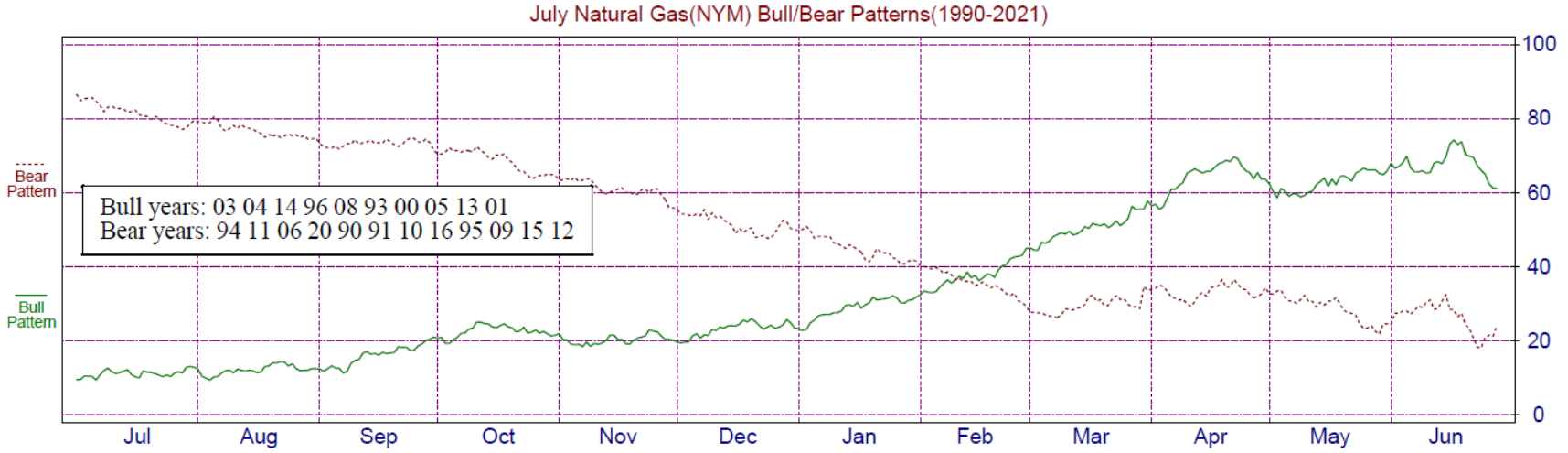


Texas A&M AgriLife Extension

NATURAL GAS

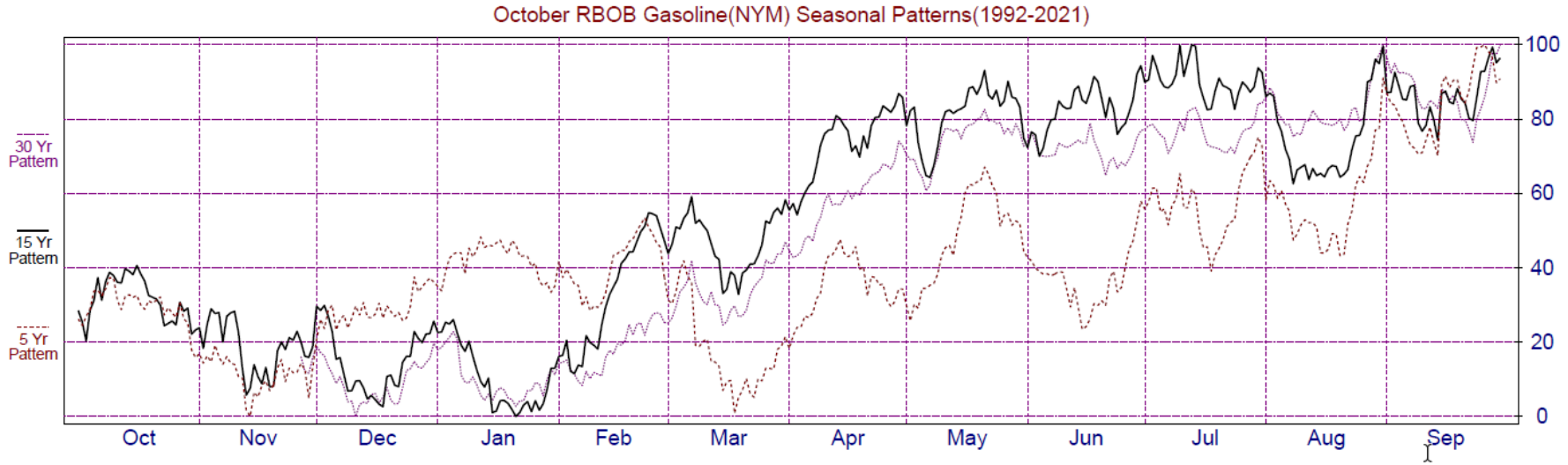
Moore Research Center, Inc.

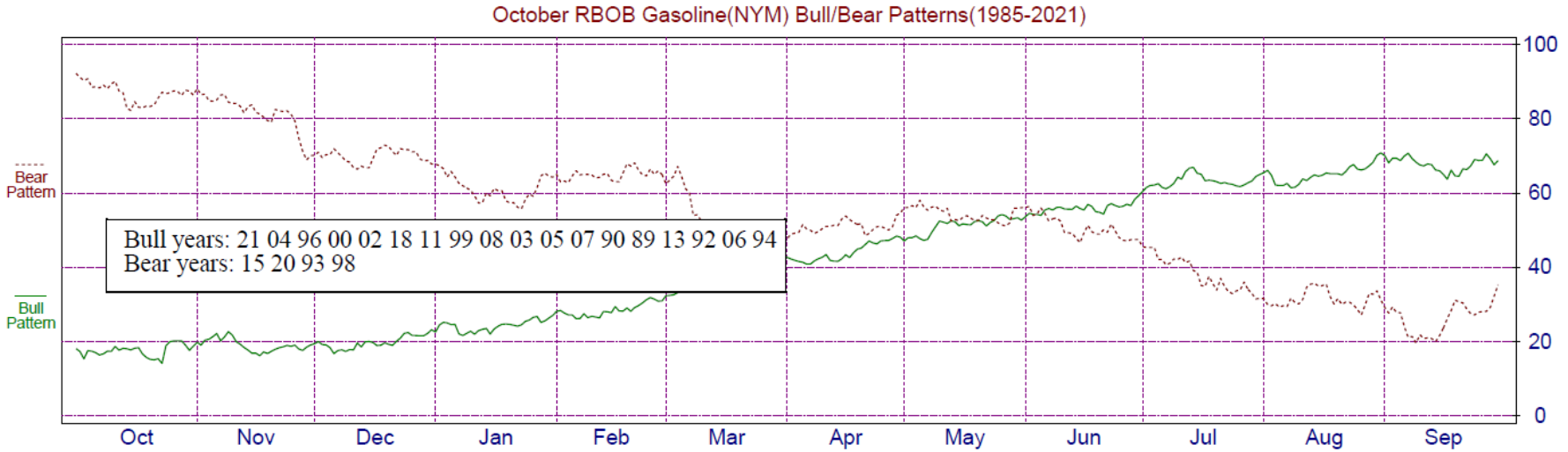




Texas A&M AgriLife Extension

GASOLINE



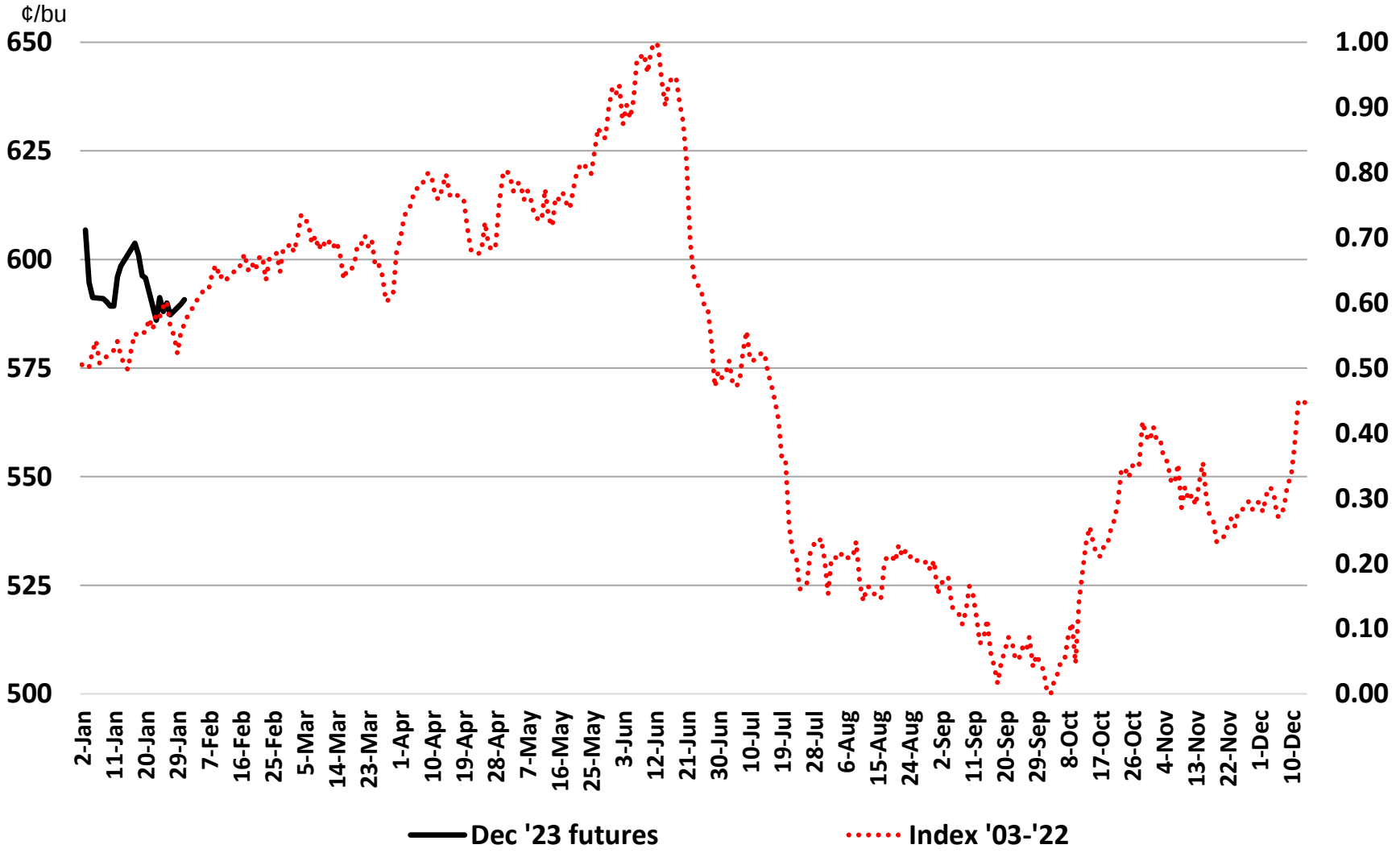


TEXAS A&M AGRILIFE EXTENSION

Counter-Seasonal Price Action

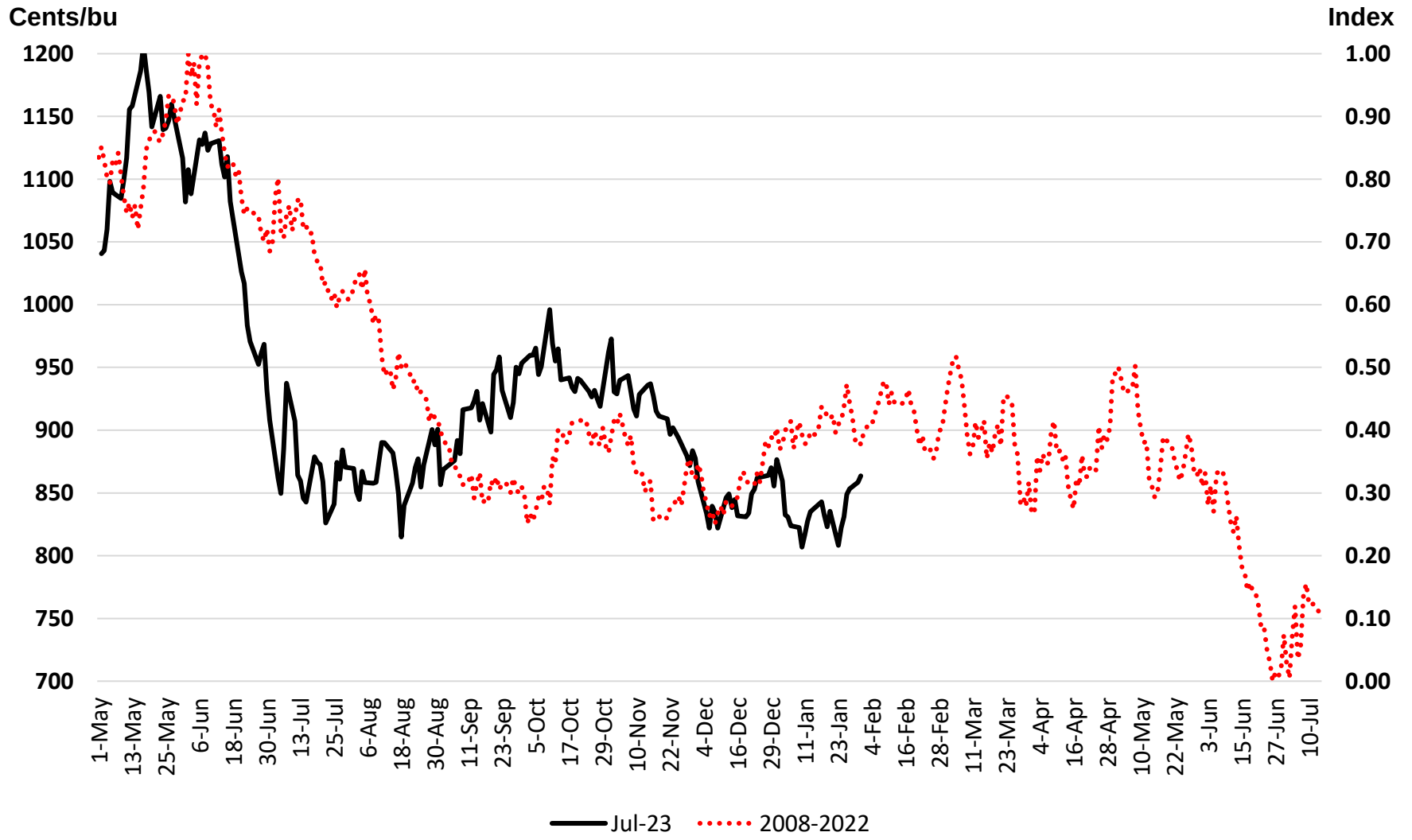
- **Seasonal analysis is used as an input for supporting a trading strategy.**
- **Seasonal analysis can also detect markets that are not behaving right.**
- **A market decline (increase) during a period when prices are normally firm (soft) can be viewed as a sign of a market's inherent weakness (strength).**
- **Counter-seasonal action should be viewed as a potentially critical market feature.**

2023 December Corn Futures and Seasonal Index Pattern



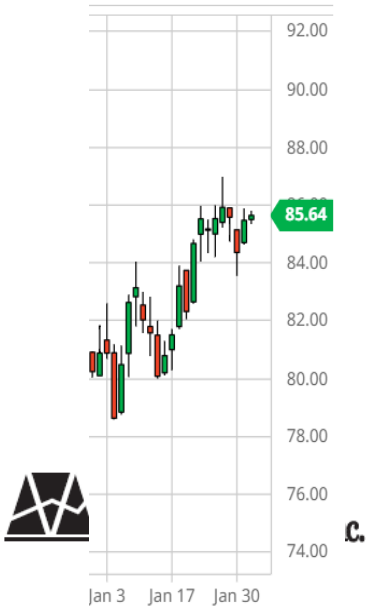
TEXAS A&M AGRILIFE EXTENSION

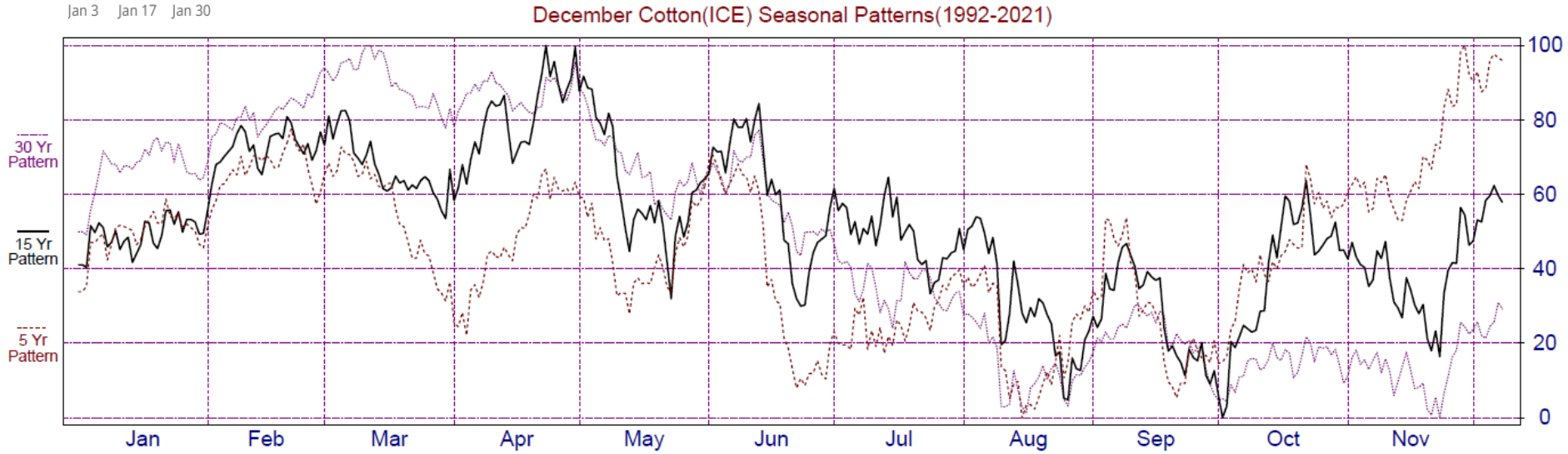
July 2023 KC Wheat Futures and July KC Wheat Seasonal Index 2008-2022



TEXAS A&M AGRILIFE EXTENSION

Dec 2023 Cotton, 1/3-1/31/2023





Texas A&M AgriLife Extension

Do marketing plans work?

Crop Year	Avg Jan-Jun	Avg Oct	70:30 price	Difference
2003	239.87	224.65	235.30	10.66
2004	292.76	204.60	266.31	61.71
2005	234.46	202.05	224.74	22.69
2006	262.60	304.01	275.02	-28.99
2007	390.05	358.34	380.54	22.20
2008	596.81	411.86	541.33	129.47
2009	424.18	371.06	408.25	37.19
2010	391.00	544.71	437.11	-107.60
2011	625.80	630.56	627.23	-3.33
2012	551.65	749.36	610.96	-138.40
2013	554.76	439.35	520.13	80.79
2014	471.81	349.81	435.21	85.40
2015	399.64	383.25	394.72	11.47
2016	392.44	349.15	379.46	30.30
2017	389.89	349.48	377.77	28.29
2018	400.30	368.53	390.77	22.24
2019	405.07	389.71	400.46	10.75
2020	362.43	398.77	373.33	-25.43
2021	505.79	538.60	515.63	-22.96
2022	660.93	685.55	668.32	-17.23
Marketing plan advantage: average cents per bu per year				10.46

Positive difference : 65% **Negative: 35%**

Price Seasonality Closing Comments

- Virtually every commodity is subject to cash and futures contract price seasonality.
- Cash seasonal variation is generally 3%-10% depending on the commodity.
- Futures seasonal price variation is often double cash volatility.
- Understanding the “events” and fundamentals can magnify seasonal pricing opportunities.
- Incorporating seasonal pricing into a marketing plan can add 3 - 5% to a producer’s income.