

EC1090

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# Plotting a Course 2021

## *Short-term and Long-term Agricultural Planning Prices for North Dakota 2021*

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Planning for the future can be a very frustrating process but one that typically pays high dividends. For most farm and ranch managers, developing realistic commodity price expectations is one of the most difficult and complex tasks of the planning process. To ease the burden of forecasting planning prices, NDSU Extension has prepared a summary of projected short- and long-term planning prices.

The estimated short-term planning prices should be used as a guide in setting price expectations for 2021 production. These planning prices can be used for preparing annual enterprise budgets and annual whole-farm cash-flow projections.

The short-term planning prices should **not** be used for planning capital purchases or expansion alternatives that extend beyond the next production year. Unfortunately, the use of short-term planning prices to make long-term decisions is common. This practice is not recommended because current supply/demand conditions rarely continue for long periods of time and are a poor indicator of future trends.

The long-term planning prices are valuable for evaluating alternative plans that affect the farm or ranch

business for more than one year. Both individual yearly price forecasts and long-term average prices are presented.

The long-term crop planning prices were derived from annual average price forecasts made by the Food and Agricultural Policy Research Institute (FAPRI). The U.S. price estimates reported in the 2020 Baseline Briefing Paper, November 2020, were adjusted using historical relationships to reflect North Dakota farm gate prices.

Historical prices are reported for reference. This information can be a valuable reminder of past price fluctuations and trends. Prices for 2020 are averages to date.

The historical crop prices were obtained from the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) "2020 North Dakota Agricultural Statistics Service publication No. 89." Historical milk prices are from FAPRI. Historical feeder steer prices are from the USDA Agricultural Marketing Service (AMS) for Kist Livestock Auction, Mandan, N.D. Historical slaughter steer, cull cow, hog and sheep prices are from NASS and AMS.

**NDSU**

EXTENSION

**CROPS**

Marketing Year	Spring Wheat	Durum Wheat	Oats	Feed Barley	Malting Barley	Oil Sunflower	Non-oil Sunflower	Corn	Soybeans	Canola	Flaxseed	Winter Wheat	Dry Beans	Dry Peas	Lentils	Alfalfa Hay	Other Hay
	(bu)	(bu)	(bu)	(bu)	(bu)	(cwt)	(cwt)	(bu)	(bu)	(cwt)	(bu)	(bu)	(cwt)	(cwt)	(cwt)	(ton)	(ton)
2015-16	4.59	6.62	2.00	2.70	5.09	19.10	27.30	3.28	8.49	15.60	8.95	3.69	24.00	13.50	28.90	82.00	59.00
2016-17	4.57	5.66	2.25	2.62	4.78	17.10	23.20	3.01	8.97	16.80	8.00	3.41	27.90	11.20	29.40	81.00	63.00
2017-18	5.72	6.00	2.55	2.94	4.59	17.10	21.70	3.04	8.88	17.60	9.53	4.14	24.10	12.00	23.50	105.00	77.00
2018-19	5.12	4.83	2.41	3.13	4.43	17.10	23.40	3.32	7.98	15.80	9.89	5.05	22.90	10.50	14.80	91.00	68.00
2019-20	4.44	4.66	2.47	3.30	4.41	19.00	23.80	3.07	7.93	14.80	9.15	3.87	29.60	9.49	13.90	88.00	66.00
<b>Historic avg. (2015-2019)</b>	<b>4.89</b>	<b>5.55</b>	<b>2.34</b>	<b>2.94</b>	<b>4.66</b>	<b>17.88</b>	<b>23.88</b>	<b>3.14</b>	<b>8.45</b>	<b>16.12</b>	<b>9.10</b>	<b>4.03</b>	<b>25.70</b>	<b>11.34</b>	<b>22.10</b>	<b>89.40</b>	<b>66.60</b>
2020-21 (to date)*	4.54	5.63	2.40	3.05	4.53	15.06**	N.A.	3.48	9.38	16.34	9.84	4.05	25.73	7.96**	18.06**	83.02	69.91
<b>2021-22 short-term</b>	<b>5.65</b>	<b>6.35</b>	<b>2.60</b>	<b>2.90</b>	<b>5.00</b>	<b>20.00</b>	<b>26.50</b>	<b>3.80</b>	<b>10.25</b>	<b>19.00</b>	<b>10.70</b>	<b>4.85</b>	<b>30.00</b>	<b>10.83</b>	<b>18.00</b>	<b>90.00</b>	<b>68.00</b>
2022-23	5.26	5.71	2.23	2.90	4.64	18.33	26.40	3.55	9.11	17.15	9.80	4.53	27.33	9.57	23.93	92.00	70.00
2023-24	5.29	5.73	2.21	2.87	4.59	18.21	26.22	3.52	9.06	17.05	9.74	4.54	27.18	9.51	23.78	95.00	72.00
2024-25	5.34	5.79	2.21	2.87	4.59	18.01	25.93	3.51	8.96	16.85	9.63	4.59	26.88	9.41	23.53	93.00	71.00
2025-26	5.38	5.83	2.21	2.87	4.59	17.93	25.82	3.51	8.92	16.78	9.59	4.63	26.76	9.37	23.43	90.00	67.00
2026-27	5.40	5.86	2.22	2.88	4.61	18.01	25.93	3.53	8.96	16.85	9.63	4.65	26.88	9.41	23.53	91.00	69.00
<b>Projected long-term avg. (2022-2026)</b>	<b>5.33<sup>1</sup></b>	<b>5.78<sup>2</sup></b>	<b>2.22<sup>3</sup></b>	<b>2.88<sup>4</sup></b>	<b>4.60<sup>5</sup></b>	<b>18.10<sup>6</sup></b>	<b>26.06<sup>7</sup></b>	<b>3.52<sup>8</sup></b>	<b>9.00<sup>9</sup></b>	<b>16.94<sup>10</sup></b>	<b>9.68<sup>11</sup></b>	<b>4.59<sup>12</sup></b>	<b>27.01<sup>13</sup></b>	<b>9.45<sup>14</sup></b>	<b>23.64<sup>15</sup></b>	<b>92.20</b>	<b>69.80</b>

\* average of beginning of marketing year to December 2020  
 \*\* average of local cash bids  
 Note: FAPRI projections are updated in January 2021

1 Spring wheat price is calculated based on the historical relationship: N.D. spring wheat = U.S. wheat x 1.07  
 2 Durum wheat price is calculated based on the historical relationship: U.S. spring wheat x 1.16  
 3 Oats price is calculated based on the historical relationship: N.D. oats = N.D. feed barley x 0.77  
 4 Feed barley price is calculated based on the historical relationship: N.D. feed barley = U.S. corn x 0.75  
 5 Malting barley price is calculated based on the historical relationship: N.D. malting barley = N.D. feed barley x 1.6  
 6 Oil sunflower price is calculated based on the historical relationship: N.D. oil sunflower = U.S. soybean x 1.87  
 7 Non-oil sunflower price is calculated based on the historical relationship: N.D. non-oil sunflower = N.D. oil sunflower x 1.44  
 8 Corn price is calculated based on the historical relationship: N.D. corn = U.S. corn x 0.92  
 9 Soybean price is calculated based on the historical relationship: N.D. soybean = U.S. soybean x 0.93  
 10 Canola price is calculated based on the historical relationship: N.D. canola = U.S. soybean x 1.75  
 11 Flaxseed price is calculated based on the historical relationship: N.D. flaxseed = U.S. soybean x 1.0  
 12 Winter wheat price is calculated based on the historical relationship: N.D. winter wheat = U.S. wheat x 0.92  
 13 Dry bean price is calculated based on the historical relationship: N.D. dry bean = N.D. soybean x 3.0  
 14 Dry pea price is calculated based on the historical relationship: N.D. dry pea = N.D. soybean x 1.05  
 15 Lentil price is calculated based on the historical relationship: N.D. lentil = N.D. dry pea x 2.5

**BEEF**

Year*	400-500 lb. Steers	500-600 lb. Steers	600-700 lb. Steers	700-800 lb. Steers	800-900 lb. Steers	1,100-1,700 lb. Cull Cows	5-Area Direct Slaughter Steers
	(cwt)	(cwt)	(cwt)	(cwt)	(cwt)	(cwt)	(cwt)
	Fourth quarter prices	Fourth quarter prices	Fourth quarter prices	First quarter prices	First quarter prices	Annual prices	Annual prices
2015	234.07	206.55	188.32	161.62	150.26	99.00	148.12
2016	151.26	137.89	128.09	133.67	126.58	74.30	120.85
2017	194.23	177.01	166.22	151.40	141.74	68.80	121.52
2018	187.67	169.21	157.80	144.95	137.42	62.60	117.12
2019	168.41	156.01	145.11	143.89	135.51	62.00	116.78
<b>Historic avg. (2015-19)</b>	<b>187.13</b>	<b>169.33</b>	<b>157.11</b>	<b>147.11</b>	<b>138.30</b>	<b>73.34</b>	<b>124.88</b>
2020 (to date)	170.96	155.85	147.04	141.00**	136.00**	66.00	108.51
<b>2021 short-term</b>	<b>185.00</b>	<b>168.00</b>	<b>158.00</b>	<b>148.00**</b>	<b>143.00**</b>	<b>68.00</b>	<b>120.00</b>
2022	187.00	170.00	160.00	150.00**	145.00**	70.00	125.00
2023	192.00	175.00	165.00	155.00**	150.00**	73.00	127.00
2024	195.00	178.00	168.00	158.00**	153.00**	75.00	130.00
2025	200.00	180.00	170.00	160.00**	155.00**	78.00	133.00
2026	205.00	185.00	175.00	165.00**	160.00**	80.00	135.00
<b>Projected long-term avg. (2022-26)</b>	<b>195.80</b>	<b>177.60</b>	<b>167.60</b>	<b>157.60</b>	<b>152.60</b>	<b>75.20</b>	<b>130.00</b>

**HOGS**

Year	250 lb. Slaughter Hogs
	(cwt)
2015	52.20
2016	46.10
2017	50.00
2018	47.00
2019	48.70
<b>Historic avg. (2015-2019)</b>	<b>48.80</b>
2020 to date	45.00
<b>2021 short-term</b>	<b>55.00</b>
2022	60.00
2023	62.00
2024	60.00
2025	61.00
2026	63.00
<b>Projected long-term avg. (2022-2026)</b>	<b>61.20</b>

**SHEEP**

Year	Slaughter Ewes	105-140 lb. Slaughter Lambs	60-90 lb. Feeder Lambs
	(cwt)	(cwt)	(cwt)
2015	54.00	146.00	188.00
2016	48.00	142.00	180.00
2017	58.00	152.00	188.00
2018	45.00	141.00	177.00
2019	44.00	149.00	177.00
<b>Historic avg. (2015-19)</b>	<b>49.80</b>	<b>146.00</b>	<b>182.00</b>
2020 to date	62.00	144.00	189.00
<b>2021 short-term</b>	<b>70.00</b>	<b>160.00</b>	<b>190.00</b>
2022	72.00	165.00	195.00
2023	75.00	170.00	200.00
2024	80.00	175.00	205.00
2025	82.00	172.00	202.00
2026	80.00	173.00	203.00
<b>Projected long-term avg. (2022-2026)</b>	<b>77.80</b>	<b>171.00</b>	<b>201.00</b>

**MILK**

Year	All Milk
	(cwt)
2015	17.10
2016	16.20
2017	17.60
2018	16.20
2019	19.50
<b>Historic avg. (2015-19)</b>	<b>17.32</b>
2020 to date	19.44
<b>2021 short-term</b>	<b>21.00</b>
2022	20.00
2023	21.00
2024	22.00
2025	21.00
2026	22.00
<b>Projected long-term avg. (2022-2026)</b>	<b>21.20</b>

\* 400-500, 500-600 and 600-700 lb. weights are fourth-quarter prices. 700-800 and 800-900 lb. weights are first-quarter prices of the next year.  
 To estimate heifer prices, subtract \$15/cwt for 400-500, 500-600 and 600-700 lb. animals and subtract \$6/cwt for 700-800 and 800-900 lb. animals.  
 Cull cow and slaughter steer prices are calendar year averages.  
 \*\* Projected for the first quarter of the next year.

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