



Estimated U.S. Dried Distillers Grains with Solubles (DDGS) Production & Use

Updated: 12/18/2009

Year (production/marketing): *	Historic				Prelim. 2008-2009	Projected 2009-2010			Projected 2010-2011		
	2004-05	2005-06	2006-07	2007-08		Low	Med.	High	Low	Med.	High
Alternative production levels											
Corn yield (bu. per acre)	160.4	147.9	149.1	151.1	153.9	160.0	162.9	164.0	150.0	159.0	164.0
Long-term Historic corn yield probability						0%	0%	0%	18%	65%	17%
Corn production (mil. bu.)	11,807	11,114	10,535	13,073	12,101	12,640	12,921	13,038	12,135	12,959	13,366
Corn usage for ethanol (mil. bushels)	1,323	1,603	2,117	3,026	3,677	4,250	4,275	4,280	4,450	4,650	4,700
DDGS Production:											
DDGS Production (mil. short tons) ^{1/}	11.25	13.63	17.99	25.72	31.25	36.13	36.34	36.38	37.83	39.53	39.95
DDGS production (mil. bu. corn equiv.)	282	347	466	675	832	975	980	981	1,019	1,065	1,077
Estimated DDGS Usage:											
Exports (mil. bu. corn equivalent)	22	36	54	96	141	172	173	172	189	198	200
Domestic use (mil. bu. corn equivalent)	259	312	412	579	691	803	808	808	830	868	877
Estimated DDGS Usage (mil. short tons):											
Domestic Usage ^{3/}	10.35	12.20	15.84	21.86	25.63	29.26	29.43	29.47	30.26	31.62	31.96
Dairy ^{4/}	3.16	3.48	4.21	5.41	5.88	6.21	6.24	6.25	6.42	6.71	6.78
Beef ^{5/}	5.96	7.32	9.87	14.15	17.20	20.30	20.42	20.46	21.01	21.96	22.19
Swine ^{6/}	0.75	0.87	1.11	1.52	1.75	1.98	1.99	1.99	2.04	2.14	2.16
Poultry ^{7/}	0.49	0.56	0.72	0.98	1.13	1.28	1.29	1.29	1.32	1.38	1.40
Exports ^{2/}	<u>0.90</u>	<u>1.43</u>	<u>2.16</u>	<u>3.86</u>	<u>5.63</u>	<u>6.86</u>	<u>6.90</u>	<u>6.91</u>	<u>7.57</u>	<u>7.91</u>	<u>7.99</u>
Total Domestic & Export Usage	11.25	13.63	17.99	25.72	31.25	36.13	36.34	36.38	37.83	39.53	39.95
Estimated DDGS Substituted for Corn (million bushels):											
Exports	22	36	54	96	141	172	173	172	189	198	200
Domestic feeding:											
Dairy ^{8/}	79	89	109	142	157	167	168	169	173	181	183
Beef ^{9/}	149	186	256	372	458	548	551	551	566	592	598
Swine ^{10/}	19	22	29	40	47	53	54	54	55	58	58
Poultry ^{11/}	<u>12</u>	<u>14</u>	<u>19</u>	<u>26</u>	<u>30</u>	<u>34</u>	<u>35</u>	<u>35</u>	<u>36</u>	<u>37</u>	<u>38</u>
Total domestic substituted for corn	259	312	412	579	691	803	808	808	830	868	877
Total Substituted for Corn	282	347	466	675	832	975	980	981	1,019	1,065	1,077
Estimated DDGS Substituted for Soybean Meal (SBM) (million short tons):											
Beef	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Dairy	1.27	1.52	1.97	2.77	3.18	3.68	3.71	3.71	3.50	3.66	3.70
Swine	0.05	0.06	0.09	0.15	0.21	0.25	0.25	0.25	0.24	0.25	0.25
Poultry	<u>0.07</u>	<u>0.25</u>	<u>0.28</u>	<u>0.32</u>	<u>0.37</u>	<u>0.38</u>	<u>0.38</u>	<u>0.38</u>	<u>0.37</u>	<u>0.37</u>	<u>0.37</u>
Total	1.40	1.83	2.35	3.26	3.78	4.33	4.35	4.36	4.13	4.30	4.34
Exported	<u>0.12</u>	<u>0.21</u>	<u>0.36</u>	<u>0.58</u>	<u>1.08</u>	<u>1.33</u>	<u>1.33</u>	<u>1.33</u>	<u>1.35</u>	<u>1.40</u>	<u>1.42</u>
Total SBM replaced	1.51	2.04	2.71	3.84	4.86	5.66	5.69	5.69	5.48	5.70	5.76
Total DDGS Substitution (acres):											
Gross acres used for ethanol (mil. harv.)	8.2	10.8	14.2	20.0	23.9	26.6	26.2	26.1	29.7	29.2	28.7
DDGS substituted for corn (mil.harv.ac.)	1.8	2.3	3.1	4.5	5.4	6.1	6.0	6.0	6.8	6.7	6.6
Net harvested corn acres used for ethanol (million acres)	6.5	8.5	11.1	15.6	18.5	20.5	20.2	20.1	22.9	22.5	22.1
Net percent of harvested corn acres used for ethanol	8.8%	11.3%	15.7%	18.0%	23.5%	25.9%	25.5%	25.3%	28.3%	27.7%	27.1%
Soybean acres replaced by DDGS substitution for soybean meal (mil. harv.)	1.53	2.02	2.68	3.86	5.05	5.53	5.39	5.32	5.69	5.42	5.36
Total Biofuels Usage (acres):											
Soybean acres needed for biodiesel	0.9	1.3	5.7	6.2	4.3	4.6	4.5	4.5	7.8	7.2	7.1
Percent of soybean acres needed for biodiesel	1%	2%	8%	10%	6%	6%	6%	6%	10%	10%	9%
Total acres needed for biofuels (ethanol and biodiesel)	7.4	9.8	16.8	21.7	22.7	25.0	24.7	24.6	30.7	29.8	29.2
Percent of corn & soybean acres needed for biofuels	5%	7%	12%	14%	15%	16%	16%	16%	20%	19%	19%

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Assumed Utilization Patterns:

^{1/} Pounds DDGS per bushel of corn	17
^{2/} Exported:	Percent varies from 8% in 2004-05 to 20% in 2010-11.
^{3/} Domestic usage assumptions:	
^{4/} Domestic usage fed to dairy	Percent varies from 50% in 2004-05 to 35.6% in 2010-11.
^{5/} Domestic usage fed to beef	Percent varies from 38% in 2004-05 to 52.4% in 2010-11.
^{6/} Domestic usage fed to swine	6%
^{7/} Domestic usage fed to poultry	6%

One pound of DDGS substitutes for:

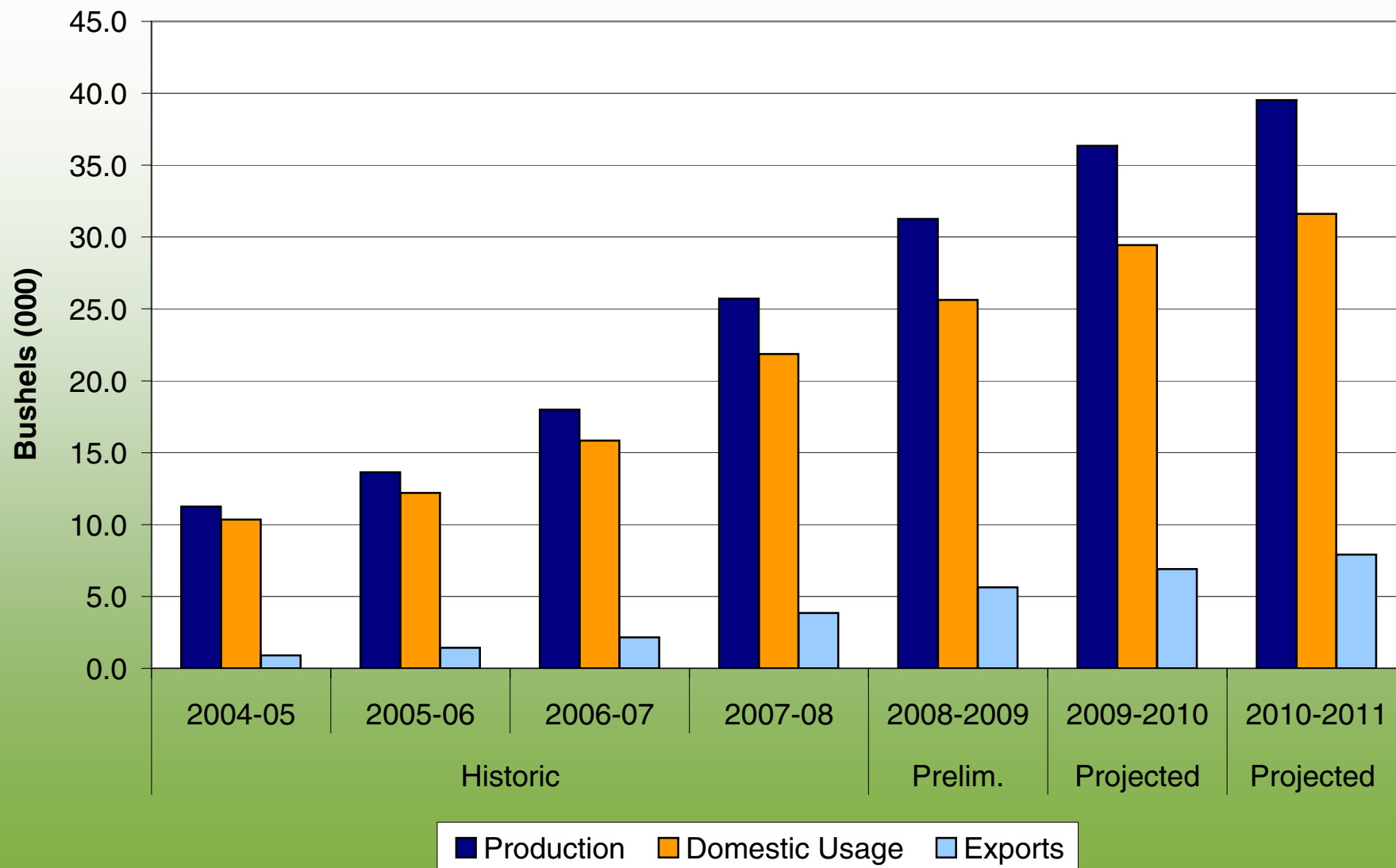
- ^{8/} 0.45 pound of corn in dairy rations
- ^{9/} One pound of corn in beef rations
- ^{10/} 0.85 pound of corn in swine rations
- ^{11/} 0.55 pound of corn in poultry rations

... and justice for all

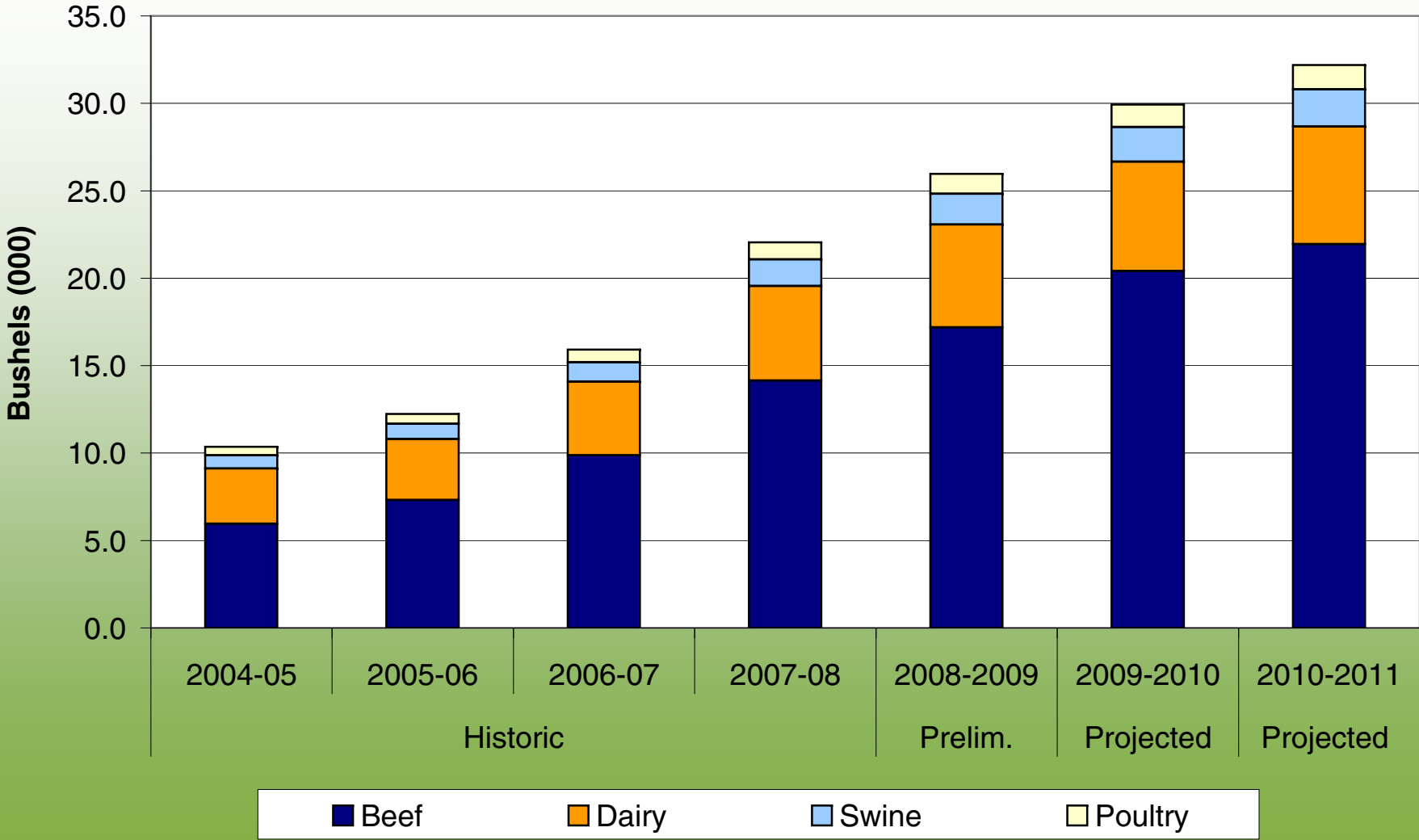
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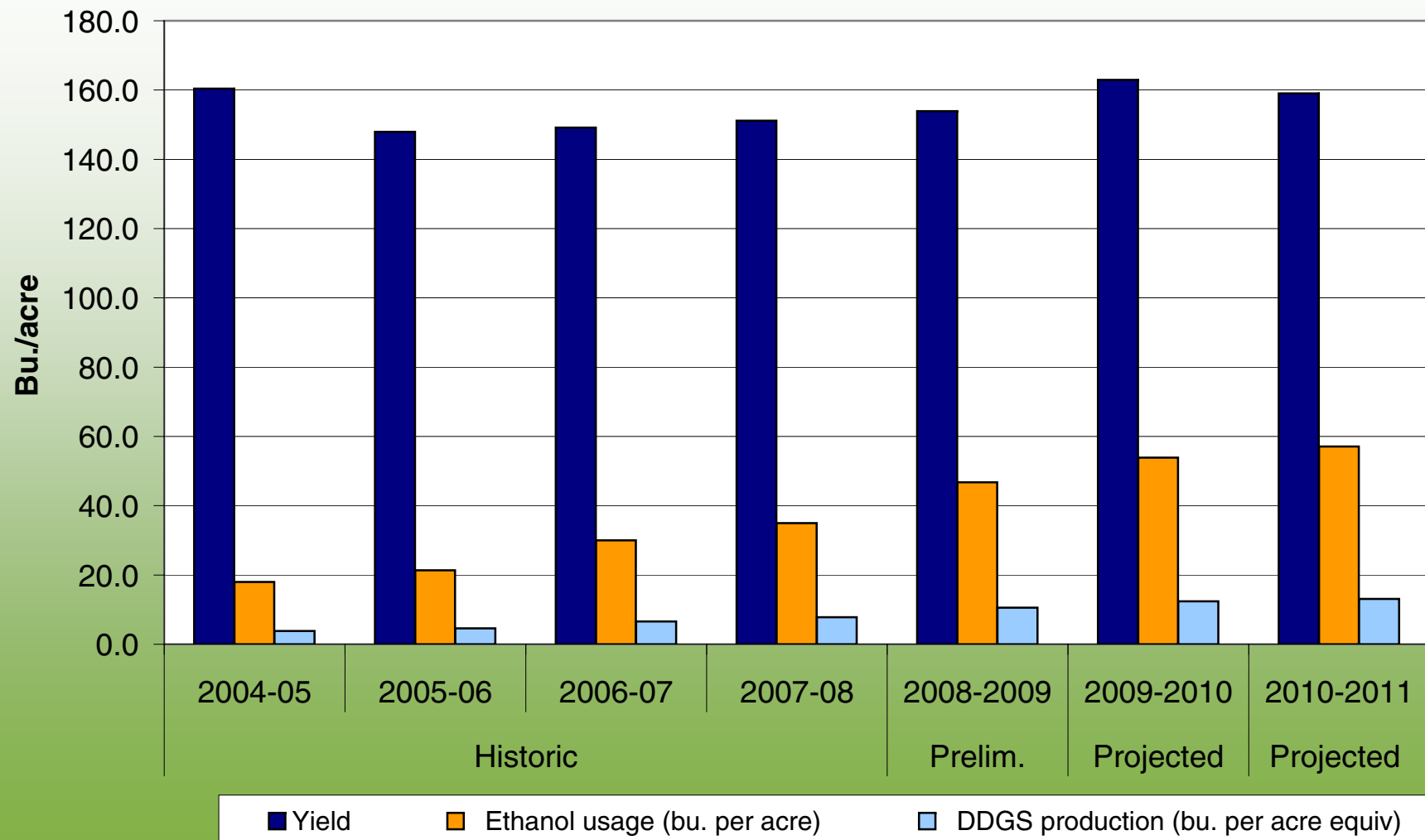
Dried Distillers Grains Production and Usage



DDGS Usage (beef, dairy, swine, and poultry), Corn Equivalent



Total Yield, Bushels used for Ethanol and Returned as Dried Distillers Grains



Total Corn Feeding & Estimated Corn Replaced by DGS Feeding (Normal crops to 2010)

