



Additional Information and Data Regarding
FAPRI's Analysis of the House & Senate Farm Bills

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On March 4, 2002, the Food and Agricultural Policy Research Institute (FAPRI) released a comparative study of the impacts of the alternative farm bills proposed by the U.S. House and Senate. The full report is FAPRI Policy Working Paper (FPWP) 01-02 and can be found at www.fapri.missouri.edu. During briefings to staff of the Ag Committees, requests were made for clarification and additional detail regarding results published in FPWP 01-02. In general, the questions fell into three categories: WTO implications of the two bills, detailed impacts on farm income, and government payments by crop. It is the purpose of this document to provide the necessary detail to address those questions.

Issues Regarding the WTO

Conservation and the WTO

Resource retirement programs qualify for exempt status (the green box) under the Uruguay Round Agreement on Agriculture (URAA) if they meet the following stipulations:

1. eligibility is determined by clearly defined criteria in programs designed to retire land or other resources from marketable agricultural production;
2. payments are conditional on the resource staying out of agricultural production for at least three years;
3. requirements cannot be placed on alternative use of the resource or other resources employed in agricultural production; and
4. payments cannot be related to any remaining agricultural production in which the producer is involved.

Environmental program payments on land that remains in production qualify for the green box exemption if eligibility requirements are clearly defined and dependent on specific conditions, possibly involving production inputs or practices, and if the payment is limited to the extra cost or income loss the producer faces to be in compliance. Conservation programs that fit these general types but fail to meet the exemption conditions would most likely fall into the non-commodity-specific amber box (as it would be hard to link the conservation payments to an individual commodity) and would possibly be limited under the URAA.

In previous submissions to the World Trade Organization, the United States has classified the Conservation Reserve Program as a resource retirement program and the Wetlands Reserve

Program, the Wildlife Habitat Incentives Program, the Farmland Protection Program, and the Environmental Quality Incentives Program as environmental programs. In all cases, the United States has submitted these programs as qualifying for the green box exemption status. The House and Senate farm bill proposals expand the list of conservation programs. The Grassland Reserve Program would likely be characterized as a resource retirement program, while the Conservation Security Program would likely be characterized as an environmental program for URAA purposes. As such they would need to meet the exemption conditions for these types of programs in order to be placed in the green box.

The Classification of the Counter-cyclical Programs

In FAPRI's original analysis, it was assumed that the counter-cyclical payment programs contained within both of the House and Senate farm bill proposals would be placed in the non-commodity-specific amber box. This placement is based on the following arguments. The general amber box placement of the counter-cyclical programs is due to the direct relation between payment rates and the level of current prices. The non-commodity-specific placement is based on the fact that producers do not have to have planted the payment crop in the year the payment is triggered. This placement is not a certainty. Arguments can be made to place the counter-cyclical payments in the amber box as commodity-specific. This argument is based on the fact that the payment structure is set on a commodity-by-commodity basis so the payments can be attributed to individual commodities. A third argument could be made that would classify the counter-cyclical program as exempt, in this case the blue box, if the counter-cyclical program had some sort of supply control. The structure of the House counter-cyclical program is such that if it fits the blue box requirements with the exception that it does not have a production limiting mechanism in the program.

The placement issue is critical to our standing with regard to domestic support limits under the URAA. The previous analyses of the House and Senate farm bill proposals show the effects of the placement of the countercyclical programs in the non-commodity-specific amber box. If the counter-cyclical programs were instead placed within the commodity-specific amber box, the changes from the results of previous analyses are indeterminate. Time constraints are such that a quantitative analysis can not be completed. However, some qualitative statements can be made. There are offsetting impacts from the switch to the commodity-specific placement.

In cases where the counter-cyclical payments count against the domestic support limit under the non-commodity-specific placement (when the total of counter-cyclical payments and other non-commodity-specific program spending exceeds five percent of the total value of domestic agricultural production), there may be advantages to a switch of placement to the commodity-specific category. In this case if some of the commodities covered by the counter-cyclical program have a combination of counter-cyclical payment and other commodity-specific payments that does not exceed five percent of the value of that commodity, then these payments are exempt from the domestic support limit. Thus, where all of the counter-cyclical payments may count if placed in the non-commodity-specific category, some of these payments could be exempted if placed in the commodity-specific category. This would tend to reduce the likelihood that our domestic support exceeds WTO limits.

There would also be cases where there would be disadvantages to the categorization of the counter-cyclical payments as commodity-specific. For this scenario to occur the total of counter-cyclical payments and other non-commodity-specific program spending would not exceed five percent of the total value of domestic agricultural production, but for individual commodities the total of counter-cyclical payments and other commodity-specific spending does exceed five percent of the value of agricultural production for these commodities. Thus, where none of the counter-cyclical payments may count if placed in the non-commodity-specific category, some of these payments could be counted if placed in the commodity-specific category. This would tend to increase the likelihood that our domestic support exceeds limits.

The Changes in the WTO Probabilities from Earlier Analyses

In our separate analyses of the House farm bill proposal (FAPRI-UMC Report 09-01) and the Senate Agriculture Committee farm bill proposal (FAPRI-UMC Report 18-01), FAPRI estimated the probabilities that the domestic support limit would be exceeded under each proposal for the 2002 marketing year. In these analyses, we placed these probabilities at 36.5 percent for the House provisions and 30.3 percent for the Senate Agriculture Committee provisions. Those analyses did not factor in the changes to the dairy, sugar, and peanut programs or the revisions made to the Senate proposal as it proceeded through the floor debate. Our latest analysis does cover these changes. For the House proposal, the peanut program changes and their interaction with the *de minimis* rule represent the bulk of the changes in our analysis and

these changes reduce our estimated probability of exceeding the domestic support limit in 2002 to 35.9 percent. For the Senate proposal, the changes in the dairy and sugar programs would lead to higher probabilities, but these revisions are offset by the changes in the peanut program and the effects of payment limitations. Thus, our estimated probability of exceeding the domestic support limit in 2002 under the Senate provisions remains at 30.3 percent.

Detailed Impacts on Net Farm Income

To the fullest extent possible, FAPRI's analysis of the alternative farm bills included provisions of both the commodity and conservation titles. As a result, impacts from all of the policy assumptions were reflected in the estimated impacts on government outlays and net farm income. A question arose regarding the contribution of specific policy changes to the overall change in farm income. In Table 1, the total change in farm income is attributed to four general areas: traditional program crops, peanuts, dairy, and conservation programs (also see Figures 1 and 2). Relative to the baseline, net farm income under the House bill increases by an annual average of \$4.37 billion for 2002-11. For the same time frame, the Senate bill boosts farm income by \$4.08 per year. Due to changes in provisions for the traditional program crops, the House bill increases farm income by an average of \$3.69 billion, while the Senate option would boost farm income by \$2.72 billion per year.

Additional spending under the conservation titles of the two bills will also provide a boost to overall farm income to the agricultural sector. Changes in conservation spending under the House plan would boost farm income by an average of \$0.62 billion, while the Senate conservation provisions would add \$1.02 billion to farm income. Farm income changes due to the peanut and dairy provisions are somewhat mixed and also relatively small.

In 2001, FAPRI analyzed the bills that were approved by the two Committees. In each report, a measure was calculated regarding the rise in farm income relative to the increase in government spending. Based on the results of the current analysis, a similar calculation has been made for the additional spending on program crops and its impact on farm income. Under the House bill, approximately 86 percent of the additional spending for program crops shows up as an increase in farm income. A comparable measure for the Senate bill would be 76 percent. In both cases, the percentage will be less than 1 due to changes in production expenses and market

prices. Since a larger portion of the additional payments under the Senate bill is directly tied to production, changes in market receipts are larger and thus offset a slightly larger portion of the government payments.

Government Payments by Crop

Tables 2-5 give detailed government payments for each crop under the two bills. Total payments shown in Table 2 contain fixed and counter-cyclical payments, as well as marketing loan benefits. Results for each of the three payments are presented separately in Tables 3-5. Data in these tables are on crop-year basis.

Figure 1. Change in Farm Income due to Program Crop Provisions

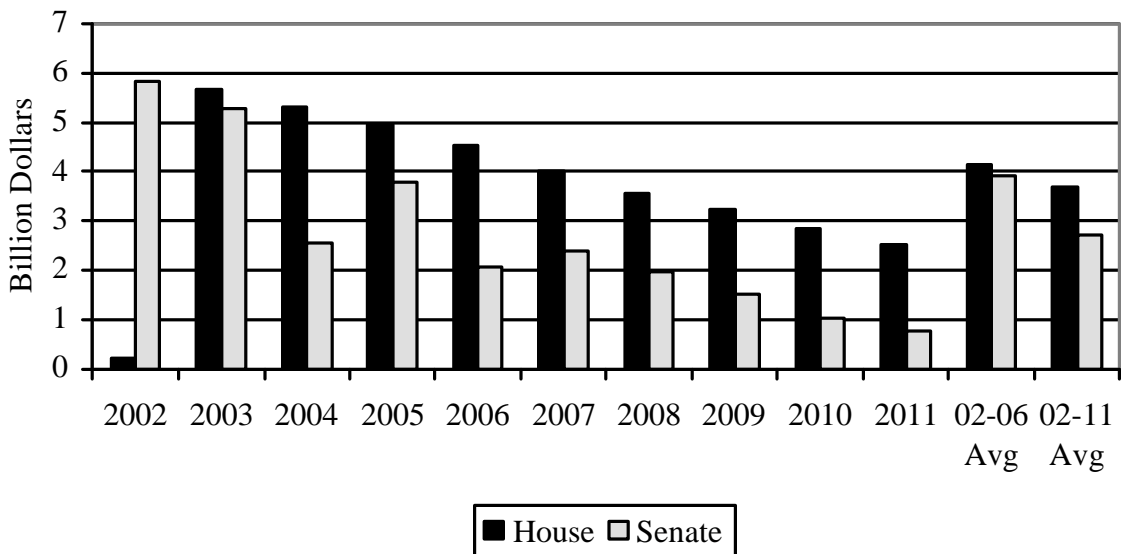


Figure 2. Change in Farm Income due to Conservation Provisions

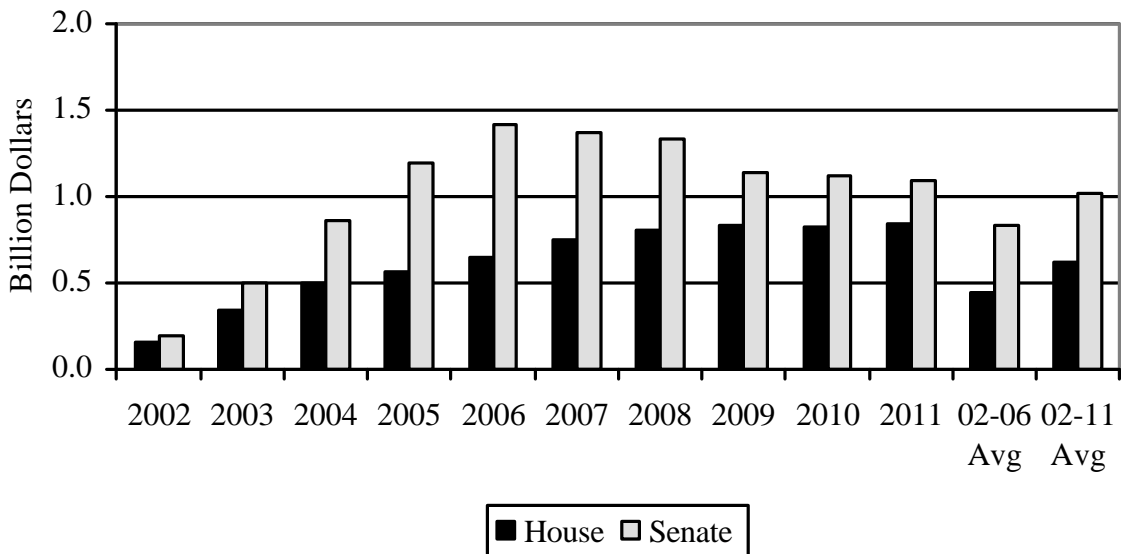


Table 1. Breaking Down the Change in Net Farm Income

Calendar Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	02-06 Avg	02-11 Avg
(Billion Dollars, Change from Baseline)												
Total Change in Net Farm Income												
House Farm Bill	0.81	6.46	6.16	5.77	5.35	4.61	4.10	3.83	3.45	3.17	4.91	4.37
Senate Farm Bill	7.10	7.02	4.17	5.40	3.74	3.61	3.20	2.59	2.10	1.84	5.49	4.08
Senate - House	6.30	0.55	-1.99	-0.37	-1.61	-1.00	-0.91	-1.24	-1.35	-1.33	0.58	-0.29
Change Due to Program Crop Provisions												
House Farm Bill	0.23	5.68	5.31	4.97	4.54	4.02	3.56	3.23	2.84	2.52	4.14	3.69
Senate Farm Bill	5.84	5.27	2.55	3.78	2.05	2.40	1.97	1.52	1.03	0.77	3.90	2.72
Senate - House	5.61	-0.41	-2.75	-1.19	-2.49	-1.62	-1.59	-1.70	-1.81	-1.74	-0.25	-0.97
Change Due to Peanut Provisions												
House Farm Bill	0.09	0.07	0.08	0.07	0.07	-0.13	-0.13	-0.14	-0.15	-0.15	0.08	-0.03
Senate Farm Bill	0.10	0.27	0.26	0.25	0.25	0.03	0.03	0.02	0.01	0.01	0.22	0.12
Senate - House	0.01	0.19	0.18	0.18	0.18	0.16	0.16	0.16	0.16	0.16	0.15	0.15
Change Due to Dairy Provisions												
House Farm Bill	0.35	0.37	0.27	0.18	0.09	-0.03	-0.12	-0.09	-0.06	-0.04	0.25	0.09
Senate Farm Bill	0.98	0.99	0.50	0.18	0.02	-0.19	-0.13	-0.09	-0.06	-0.04	0.53	0.22
Senate - House	0.63	0.61	0.23	0.00	-0.07	-0.17	-0.01	-0.00	0.00	0.00	0.28	0.12
Change Due to Conservation Provisions												
House Farm Bill	0.15	0.34	0.50	0.56	0.65	0.75	0.80	0.83	0.82	0.84	0.44	0.62
Senate Farm Bill	0.19	0.50	0.86	1.19	1.42	1.37	1.33	1.14	1.12	1.09	0.83	1.02
Senate - House	0.04	0.15	0.36	0.63	0.77	0.63	0.53	0.30	0.30	0.25	0.39	0.40

Table 2. Crop Payments and Marketing Loan Gains Under Alternative Farm Bills

Crop Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	02-06 Avg	02-10 Avg
9-Crop Total	(Million Dollars)										
House Farm Bill	16,540	15,754	14,514	13,397	12,011	10,664	9,903	9,172	8,679	14,443	12,293
Senate Farm Bill	16,791	16,306	14,129	13,024	10,938	9,379	8,446	7,528	6,909	14,237	11,494
Senate - House	250	551	(385)	(373)	(1,073)	(1,286)	(1,457)	(1,644)	(1,770)	(206)	(799)
Wheat											
House Farm Bill	2,640	2,374	2,189	2,013	1,824	1,646	1,557	1,452	1,376	2,208	1,897
Senate Farm Bill	2,585	2,356	1,982	1,769	1,411	1,141	994	850	744	2,021	1,537
Senate - House	(55)	(18)	(207)	(244)	(413)	(505)	(563)	(602)	(633)	(187)	(360)
Corn											
House Farm Bill	6,484	6,478	6,010	5,469	4,758	4,181	3,867	3,509	3,290	5,840	4,894
Senate Farm Bill	6,452	6,550	5,682	5,100	4,030	3,399	3,039	2,578	2,287	5,563	4,346
Senate - House	(32)	72	(328)	(369)	(729)	(781)	(829)	(931)	(1,003)	(277)	(548)
Sorghum											
House Farm Bill	553	535	500	452	396	362	336	303	286	487	414
Senate Farm Bill	573	524	478	425	358	318	284	243	214	472	380
Senate - House	20	(11)	(22)	(27)	(38)	(44)	(51)	(60)	(72)	(16)	(34)
Barley											
House Farm Bill	271	269	255	240	214	193	176	158	147	250	214
Senate Farm Bill	275	274	263	249	222	201	182	164	144	257	219
Senate - House	5	5	7	8	8	8	6	6	(3)	7	6
Oats											
House Farm Bill	77	71	67	63	56	51	46	41	38	67	57
Senate Farm Bill	91	87	84	80	74	69	64	60	55	83	74
Senate - House	14	16	17	17	18	18	19	18	17	16	17
Soybeans											
House Farm Bill	3,277	2,945	2,522	2,332	2,080	1,758	1,536	1,460	1,413	2,631	2,147
Senate Farm Bill	3,973	3,659	3,092	2,878	2,524	2,119	1,823	1,697	1,617	3,225	2,598
Senate - House	696	714	570	545	444	361	287	236	204	594	451
Minor Oilseeds											
House Farm Bill	129	114	98	90	78	64	54	50	46	102	80
Senate Farm Bill	220	202	177	166	147	125	109	99	90	182	148
Senate - House	91	88	80	75	68	61	55	49	44	80	68
Upland Cotton											
House Farm Bill	1,915	1,893	1,812	1,745	1,653	1,538	1,476	1,390	1,323	1,803	1,638
Senate Farm Bill	1,708	1,755	1,479	1,486	1,333	1,212	1,163	1,076	1,023	1,552	1,359
Senate - House	(207)	(137)	(333)	(259)	(320)	(326)	(313)	(314)	(300)	(251)	(279)
Rice											
House Farm Bill	1,195	1,076	1,060	992	953	872	856	809	760	1,055	953
Senate Farm Bill	914	899	892	870	840	795	788	762	734	883	833
Senate - House	(281)	(177)	(169)	(121)	(113)	(77)	(68)	(47)	(26)	(172)	(120)

Table 3. Crop Fixed Payments Under Alternative Farm Bills

Crop Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	02-06 Avg	02-10 Avg
9-Crop Total	(Million Dollars)										
House Farm Bill	5,071	5,071	5,071	5,071	5,071	5,071	5,071	5,071	5,071	5,071	5,071
Senate Farm Bill	8,105	8,077	4,282	4,282	2,398	2,398	2,398	2,398	2,398	5,428	4,082
Senate - House	3,034	3,005	(790)	(790)	(2,673)	(2,673)	(2,673)	(2,673)	(2,673)	357	(990)
Wheat											
House Farm Bill	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082
Senate Farm Bill	1,325	1,325	662	662	333	333	333	333	333	861	626
Senate - House	242	242	(420)	(420)	(750)	(750)	(750)	(750)	(750)	(221)	(456)
Corn											
House Farm Bill	2,017	2,017	2,017	2,017	2,017	2,017	2,017	2,017	2,017	2,017	2,017
Senate Farm Bill	2,942	2,942	1,471	1,471	741	741	741	741	741	1,913	1,392
Senate - House	925	925	(546)	(546)	(1,276)	(1,276)	(1,276)	(1,276)	(1,276)	(103)	(625)
Sorghum											
House Farm Bill	179	179	179	179	179	179	179	179	179	179	179
Senate Farm Bill	219	191	95	95	48	48	48	48	48	130	93
Senate - House	40	12	(84)	(84)	(131)	(131)	(131)	(131)	(131)	(49)	(86)
Barley											
House Farm Bill	85	85	85	85	85	85	85	85	85	85	85
Senate Farm Bill	87	87	44	44	22	22	22	22	22	57	41
Senate - House	3	3	(41)	(41)	(63)	(63)	(63)	(63)	(63)	(28)	(43)
Oats											
House Farm Bill	5	5	5	5	5	5	5	5	5	5	5
Senate Farm Bill	14	14	7	7	4	4	4	4	4	9	7
Senate - House	9	9	2	2	(1)	(1)	(1)	(1)	(1)	4	2
Soybeans											
House Farm Bill	727	727	727	727	727	727	727	727	727	727	727
Senate Farm Bill	1,619	1,619	809	809	406	406	406	406	406	1,052	765
Senate - House	892	892	82	82	(321)	(321)	(321)	(321)	(321)	326	38
Minor Oilseeds											
House Farm Bill	16	16	16	16	16	16	16	16	16	16	16
Senate Farm Bill	71	71	35	35	18	18	18	18	18	46	33
Senate - House	55	55	19	19	2	2	2	2	2	30	17
Upland Cotton											
House Farm Bill	564	564	564	564	564	564	564	564	564	564	564
Senate Farm Bill	1,322	1,322	661	661	330	330	330	330	330	859	624
Senate - House	758	758	97	97	(233)	(233)	(233)	(233)	(233)	295	60
Rice											
House Farm Bill	396	396	396	396	396	396	396	396	396	396	396
Senate Farm Bill	507	507	497	497	497	497	497	497	497	501	499
Senate - House	111	111	100	100	100	100	100	100	100	105	103

Table 4. Crop Counter-cyclical Payments Under Alternative Farm Bills

Crop Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	02-06 Avg	02-10 Avg
9-Crop Total	(Million Dollars)										
House Farm Bill	6,277	5,872	5,468	4,943	4,221	3,630	3,175	2,705	2,316	5,356	4,290
Senate Farm Bill	16	16	2,604	2,383	3,304	2,887	2,537	2,176	1,868	1,665	1,977
Senate - House	(6,261)	(5,856)	(2,863)	(2,560)	(917)	(743)	(638)	(530)	(448)	(3,691)	(2,313)
Wheat											
House Farm Bill	1,250	1,064	947	814	663	513	437	348	276	947	701
Senate Farm Bill	0	0	452	396	531	411	341	273	211	276	290
Senate - House	(1,250)	(1,064)	(495)	(418)	(132)	(103)	(96)	(75)	(66)	(672)	(411)
Corn											
House Farm Bill	2,729	2,653	2,511	2,264	1,854	1,629	1,402	1,158	974	2,402	1,908
Senate Farm Bill	0	0	995	896	1,145	1,050	909	754	613	607	707
Senate - House	(2,729)	(2,653)	(1,516)	(1,368)	(710)	(579)	(493)	(404)	(361)	(1,795)	(1,201)
Sorghum											
House Farm Bill	164	155	149	136	115	106	91	75	63	144	117
Senate Farm Bill	0	0	83	78	108	102	91	79	67	54	68
Senate - House	(164)	(155)	(65)	(58)	(7)	(4)	1	4	4	(90)	(49)
Barley											
House Farm Bill	103	101	94	90	77	69	59	50	42	93	76
Senate Farm Bill	0	0	37	36	52	49	45	42	36	25	33
Senate - House	(103)	(101)	(57)	(54)	(26)	(20)	(15)	(9)	(6)	(68)	(43)
Oats											
House Farm Bill	44	44	42	41	35	33	29	26	24	41	35
Senate Farm Bill	0	0	6	6	9	8	8	8	8	4	6
Senate - House	(44)	(44)	(35)	(35)	(26)	(24)	(21)	(18)	(17)	(37)	(29)
Soybeans											
House Farm Bill	736	663	576	520	463	374	307	277	248	592	463
Senate Farm Bill	0	0	597	536	785	666	578	517	477	383	462
Senate - House	(736)	(663)	20	16	322	292	271	240	229	(208)	(1)
Minor Oilseeds											
House Farm Bill	15	13	11	10	9	7	5	5	4	12	9
Senate Farm Bill	0	0	26	23	34	29	25	22	20	17	20
Senate - House	(15)	(13)	15	13	25	22	20	17	15	5	11
Upland Cotton											
House Farm Bill	956	943	907	871	823	752	705	646	581	900	798
Senate Farm Bill	0	0	389	393	626	563	530	473	430	282	378
Senate - House	(956)	(943)	(518)	(478)	(197)	(189)	(175)	(172)	(151)	(618)	(420)
Rice											
House Farm Bill	281	236	230	198	182	147	139	120	103	225	182
Senate Farm Bill	16	16	19	19	14	9	9	7	7	17	13
Senate - House	(265)	(220)	(212)	(179)	(167)	(138)	(130)	(113)	(96)	(209)	(169)

Table 5. Crop Marketing Loan Gains Under Alternative Farm Bills

Crop Year	2002	2003	2004	2005	2006	2007	2008	2009	2010	02-06 Avg	02-10 Avg
(Million Dollars)											
9-Crop Total											
House Farm Bill	5,192	4,811	3,975	3,383	2,719	1,963	1,657	1,396	1,292	4,016	2,932
Senate Farm Bill	8,670	8,213	7,243	6,359	5,236	4,094	3,511	2,955	2,643	7,144	5,436
Senate - House	3,478	3,402	3,268	2,976	2,517	2,130	1,854	1,559	1,351	3,128	2,504
Wheat											
House Farm Bill	308	227	160	117	79	50	37	22	18	178	113
Senate Farm Bill	1,260	1,031	868	711	548	398	320	245	201	884	620
Senate - House	952	804	708	594	468	347	283	223	183	705	507
Corn											
House Farm Bill	1,738	1,808	1,482	1,189	888	535	448	334	299	1,421	969
Senate Farm Bill	3,510	3,608	3,216	2,734	2,144	1,609	1,388	1,083	932	3,043	2,247
Senate - House	1,772	1,800	1,734	1,545	1,257	1,073	940	749	633	1,622	1,278
Sorghum											
House Farm Bill	210	200	172	137	102	76	66	48	44	164	117
Senate Farm Bill	354	333	299	252	202	168	145	116	99	288	219
Senate - House	144	133	127	115	100	91	79	68	55	124	101
Barley											
House Farm Bill	83	84	76	66	51	39	32	23	20	72	53
Senate Farm Bill	188	187	181	169	148	130	115	100	87	175	145
Senate - House	105	103	105	103	97	91	83	77	66	103	92
Oats											
House Farm Bill	28	22	20	17	15	14	11	10	9	21	16
Senate Farm Bill	77	73	71	67	61	57	52	48	44	70	61
Senate - House	49	51	51	50	46	43	41	38	36	49	45
Soybeans											
House Farm Bill	1,815	1,555	1,219	1,085	890	657	503	456	438	1,313	958
Senate Farm Bill	2,354	2,040	1,686	1,533	1,332	1,047	839	773	734	1,789	1,371
Senate - House	539	485	467	447	443	390	336	317	296	476	413
Minor Oilseeds											
House Farm Bill	98	85	71	64	53	41	32	29	26	74	55
Senate Farm Bill	150	131	116	107	95	78	66	59	53	120	95
Senate - House	51	46	45	43	41	37	34	30	27	45	39
Upland Cotton											
House Farm Bill	395	386	341	310	266	222	207	181	178	340	276
Senate Farm Bill	386	434	429	432	377	319	303	272	263	412	357
Senate - House	(9)	47	88	122	110	97	96	92	85	72	81
Rice											
House Farm Bill	517	444	434	398	375	329	320	293	261	433	374
Senate Farm Bill	390	376	376	355	329	289	282	258	231	365	321
Senate - House	(127)	(68)	(57)	(43)	(46)	(40)	(38)	(35)	(30)	(68)	(54)