EC-1214

Loan Deficiency Payment Rates

for Select Crops and Locations in North Dakota

George Flaskerud
Extension Crops Economist

NDSU Extension Service
North Dakota State University
Fargo, North Dakota 58105

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The Federal Agriculture Improvement and Reform Act of 1996 required that a marketing assistance loan program be administered for the 1996 through 2002 crops. Earlier legislation authorized the marketing assistance loan program for soybeans and other oilseeds starting in 1991, and for wheat and feed grains in 1993. The marketing assistance loan program includes provisions for marketing loan gains and loan deficiency payments (LDP).

The LDP rate and the marketing loan gain per unit are the same value and equal to the amount by which the applicable county loan rate exceeds the posted county price. The posted county price (PCP) is a USDA estimate of the local market price. The county loan rate is based off the national loan rate, which is set by legislation and USDA.

LDP rates are relevant to 13 wheat, feed grain and oilseed commodities. They include wheat, corn, grain sorghum, barley, oats, soybeans and minor oilseeds (oil-type sunflowerseed, other-type sunflowerseed, flaxseed, canola, rapeseed, safflowerseed and mustard seed).

Rates for an LDP can vary significantly across the state and nation for producers of the same crop on a given day. In addition, the rate can have a seasonal pattern, since crop prices are usually the lowest near harvest due to supply pressures.

LDP rates need to be considered in conjunction with marketing strategies. Taking the LDP at one time and selling at a later date results in financial risk of decreases in crop prices and total revenue less than loan.

Deadlines need to be observed for loans and LDPs. "Loans and LDPs are available for eligible commodities from the time of harvest until the final loan availability date. For wheat, barley, oats, canola, rapeseed, and flaxseed, the final loan availability date is March 31 following the year in which the crop is typically harvested. For the other marketing assistance loan commodities, the final loan availability date is May 31 following the year in which the crop is typically harvested." A crop can remain under loan for nine months.

In a study to analyze LDP rates for select crops and locations in North Dakota during 1998-2001, specific objectives include:

- Compare LDP rates by location.
- Analyze the time series of LDP rates to identify patterns for developing marketing strategies.
- Evaluate the implications of LDP rates on marketing strategies.

LDP rates were collected for the major crops produced in Cass, Ward and Stark Counties in North Dakota. They were collected (primarily for Thursdays and Fridays) from the North Dakota State Farm Service Agency for the period August 1998 - August 1999, and from Data Transmission Network during September 1999 - June 2001.

LDP rates were averaged for each month. Positive amounts are relevant for the LDP rate. Negative amounts indicate how much the PCP was above the loan rate. LDP rates for the crops represented in the study are per bushel except for sunflowers and canola, which are per hundredweight.

The analysis focused on two strategies, the first involving the timing of taking the LDP which would be in lieu of securing a loan from the Commodity Credit Corporation, the second involving securing a loan and repaying the loan at the PCP where the PCP may be locked-in for 60 days. Details and policy updates on procedures for the strategies should be obtained from the local Farm Service Agency.

The best time to take the LDP and the best time to sell the crop were analyzed with the objective of maximizing profit. Selling strategies in this study were limited to cash sales using prices adjusted for storage costs, which are explained in Extension publication EC-1011, Basis for Selected North Dakota Crops. The prices, presented in Table 1, are from North Dakota Agricultural Statistics for all crops, except canola which are from Archer Daniels Midland (ADM) at Velva, North Dakota.

The strategies described should be evaluated with current information and caution since relatively few years were analyzed. In addition, policies are subject to change.

Table 1. Prices received by North Dakota producers in cents per unit.

Commodity	Year	Unit	J	F	M	A	M	J	J	A	S	O	N	D
Hard Red	1998	Bu	343	334	344	335	325	326	308	290	277	311	325	320
Spring Wheat	1999	Bu	310	307	302	292	290	300	295	286	282	276	293	280
	2000	Bu	271	284	281	290	293	296	267	253	257	278	290	292
	2001	Bu	291	289	286	292	303	300						
Durum Wheat	1998	Bu	498	463	466	455	408	395	330	310	290	299	303	304
	1999	Bu	321	275	276	272	282	290	287	273	203	219	256	284
	2000	Bu	278	263	240	272	291	261	266	222	198	224	275	294
	2001	Bu	281	222	208	245	254	255						
Hard Red	1998	Bu	282		311	250	297	270	250	266	237	322		303
Winter Wheat	1999	Bu	291		230			247	282	225	210	189	234	245
	2000	Bu	236	254	213	254	275	233	213	212	194	243	257	244
	2001	Bu	274	263	249	256	225	230						
Corn	1998	Bu	224	226	228	207	204	206	197	176	166	167	169	168
	1999	Bu	172	173	177	186	191	181	162	159	154	158	143	158
	2000	Bu	154	168	178	183	189	180	161	145	137	162	159	163
	2001	Bu	165	165	172	169	158							
Feed Barley	1998	Bu	182	175	168	155	154	153	137	130	116	122	131	134
	1999	Bu	135	132	128	127	132	132	135	128	139	132	149	146
	2000	Bu	139	143	143	138	157	148	130	123	120	132	142	158
	2001	Bu	152	155	151	145	134	135						
Malting Barley	1998	Bu	216	220	218	219	207	206	193	188	185	179	187	189
	1999	Bu	188	185	186	171	185	180	192	207	209	221	228	227
	2000	Bu	226	208	211	212	220	201	195	168	189	201	188	193
	2001	Bu	192	191	181	184	178	180						
Soybeans	1998	Bu	620	613	602	603	597	583	572	514	505	495	495	490
	1999	Bu	476	432	412	423	409	413	393	410	423	414	401	395
	2000	Bu	409	432	447	460	489	446	421	416	430	416	424	438
	2001	Bu	429	420	412	389	401							
Oil Sunflowers	1998	Cwt	1080	1130	1170	1250	1340	1380	1400	1380	1060	1020	1000	1000
	1999	Cwt	1040	953	857	861	856	784	755	753	762	665	615	636
	2000	Cwt	667	674	656	698	658	677	627	594	606	523	537	567
	2001	Cwt	597	633	671	687	691							
Canola	1998	Cwt	1172	1204	1254	1258	1282	1258	1152	998	1018	1038	1106	1116
	1999	Cwt	1080	978	954	980	990	988	840	796	770	730	736	728
	2000	Cwt	760	748	778	802	766	730	692	646	656	636	674	727
	2001	Cwt	722	727	764	777	820	866						

Source: North Dakota Agricultural Statistics for all crops except canola which are from ADM at Velva.

Hard Red Spring Wheat

Spring wheat LDP rates (Figures 1-5) were the same in Cass and Stark which were higher than in Ward during 1998-2001. The highest LDP rates occurred during August-September. The highest was in August 2000 followed by August 1999 and September 1998. Marketing strategies that captured the LDP near harvest were the most profitable. The most profitable time to sell the crop was November.

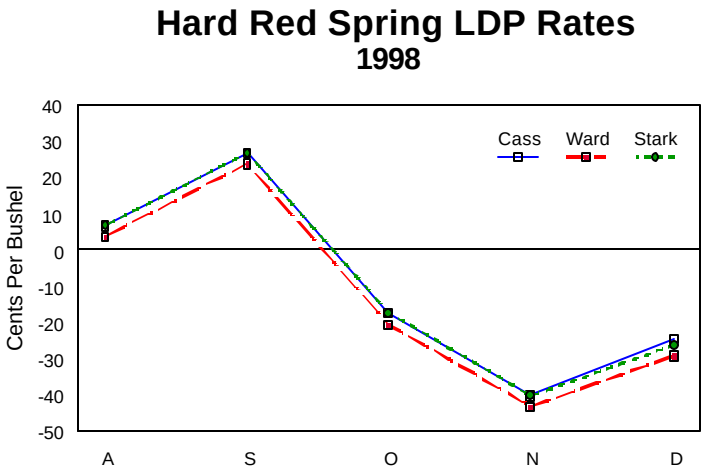


Figure 1

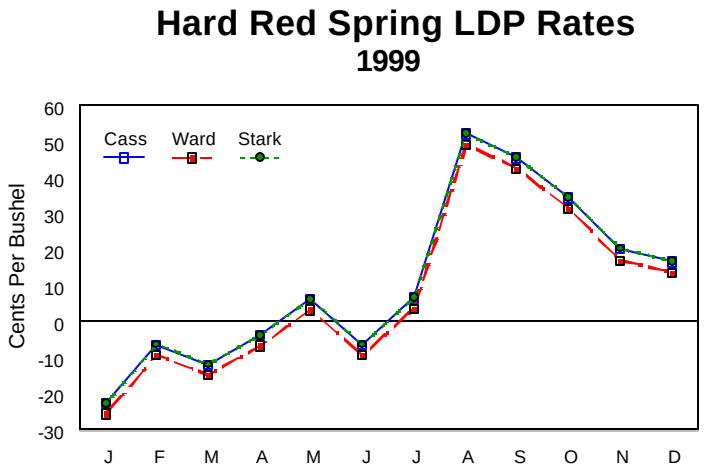
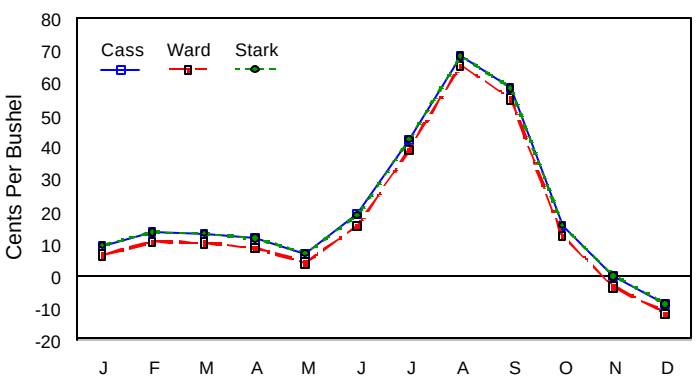


Figure 2



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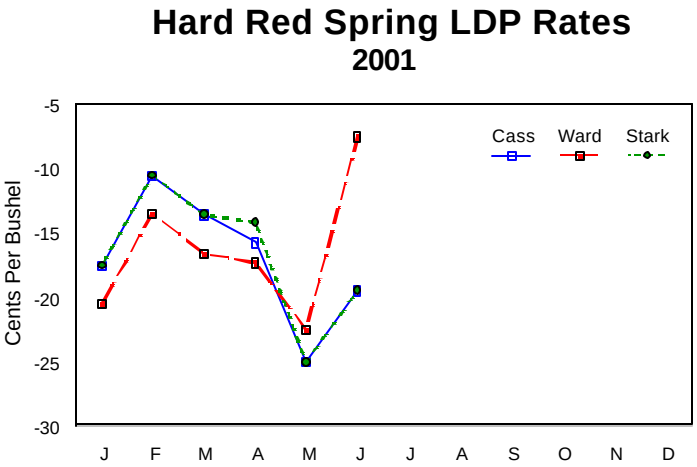


Figure 4

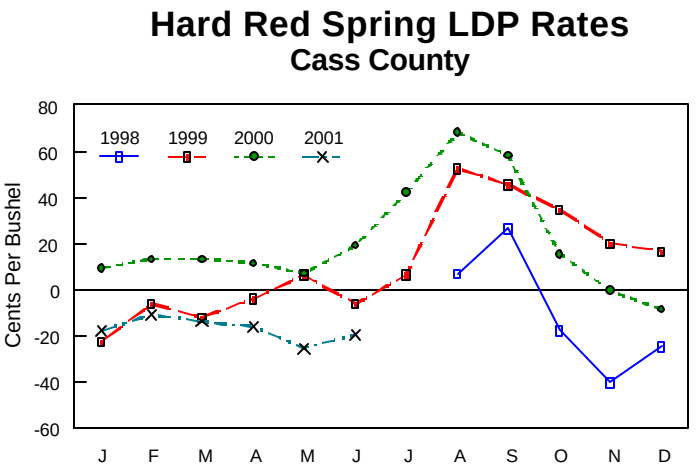


Figure 5

Durum Wheat

LDP rates for durum are presented in Figures 6-10. The rates varied depending on the time period.

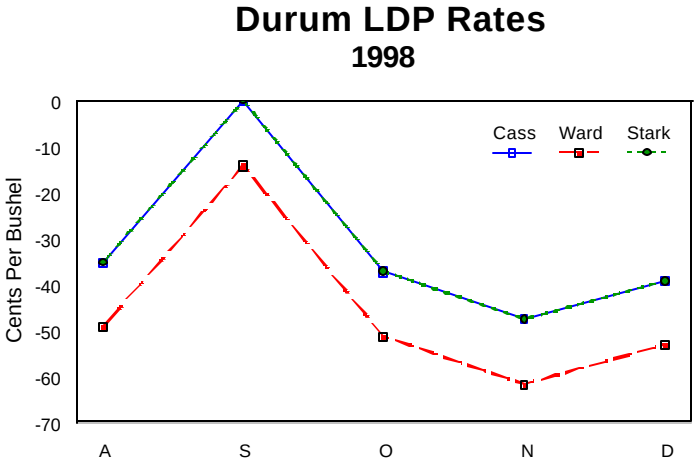
During August 1998 - November 1999, Ward did not have an LDP while Cass and Stark had a few small LDP rates during September, February and March. Cass and Stark had the same rates, which were higher than in Ward.

During August 1999 - May 2000, the monthly average LDP reached a high during November-December and stayed there during the balance of the period for all three locations. Beginning in December 1999, the LDP was about the same at all three locations.

During August 2000-April 2001, the highest LDP rate occurred during August-September as would be expected. This rate was also the highest for the study period.

Future marketing strategies that capture the LDP during harvest may be the most profitable. It would appear that USDA made differential adjustments during September-December 1999, since the LDP rate increased while the durum price received by producers also increased, and the rates at all three locations converged.

Storage into December-January was generally profitable during 1998-2001. Historical seasonal price patterns favor November-December.



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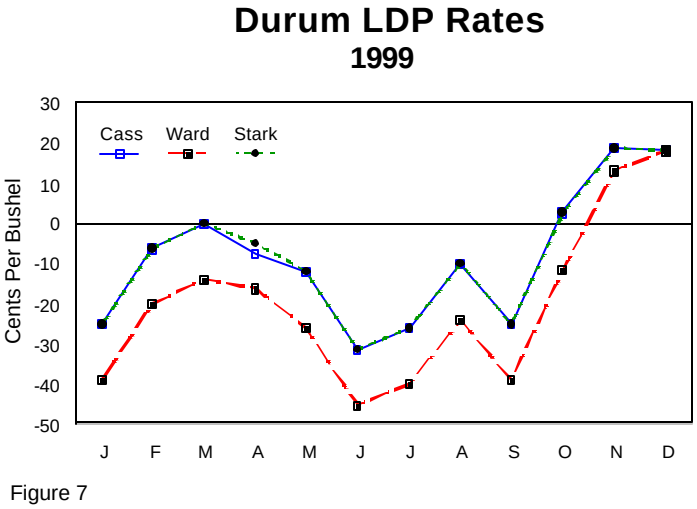

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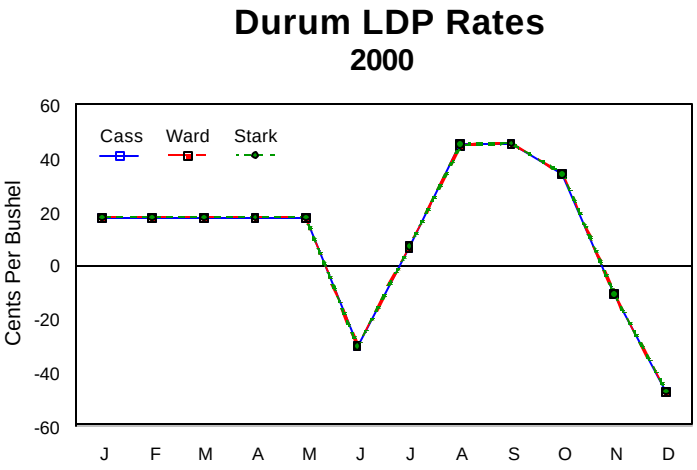

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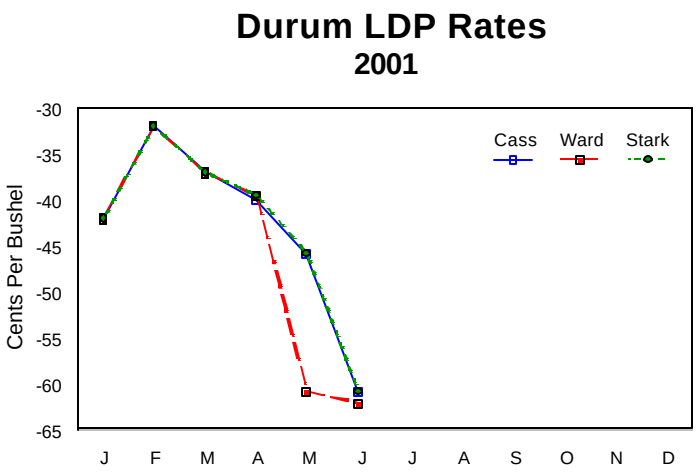

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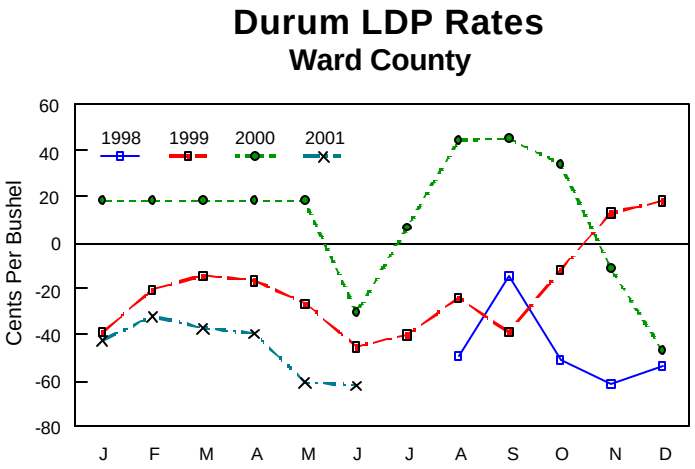

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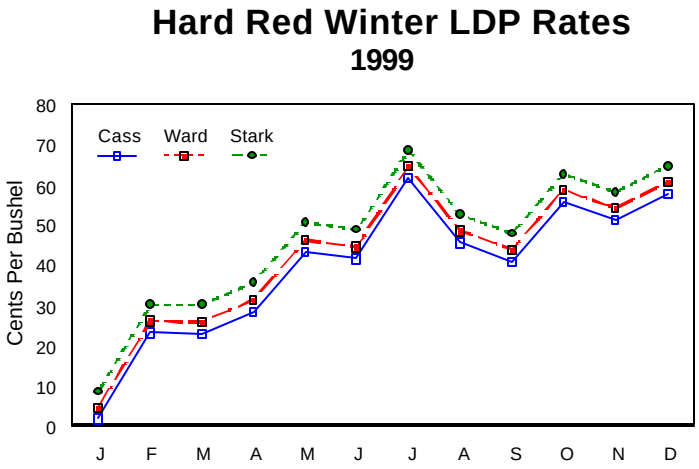


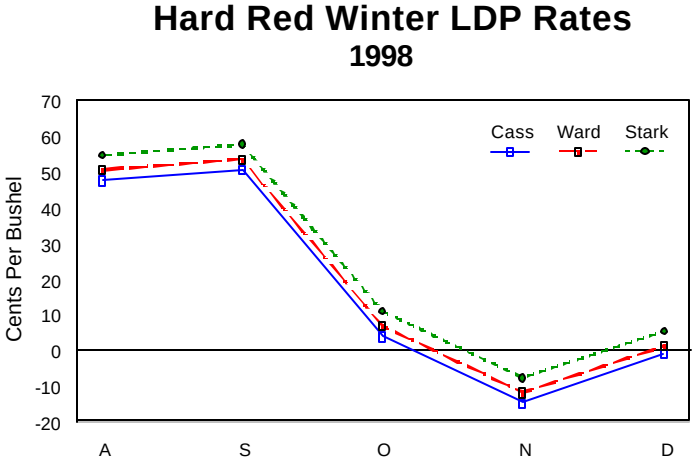
Figure 12

Hard Red Winter Wheat

The pattern for hard red winter LDP rates was identical for the three locations, although their rates differed (Figures 11-15). Stark had the highest rates, followed by Ward and Cass.

Seasonal peaks occurred at different times each year. LDP rates were the highest at harvest in 1998. During 1999, the rates peaked in July and again during October-December. In 2000, the LDP rates were the highest in January-May and again during harvest in August.

A strategy of locking-in the PCP at harvest for 60 days would have been appropriate, since the marketing loan gain rates were the highest either at harvest or about two months later. Storage was profitable into October for the 1998 crop, May for the 1999 crop and January for the 2000 crop.



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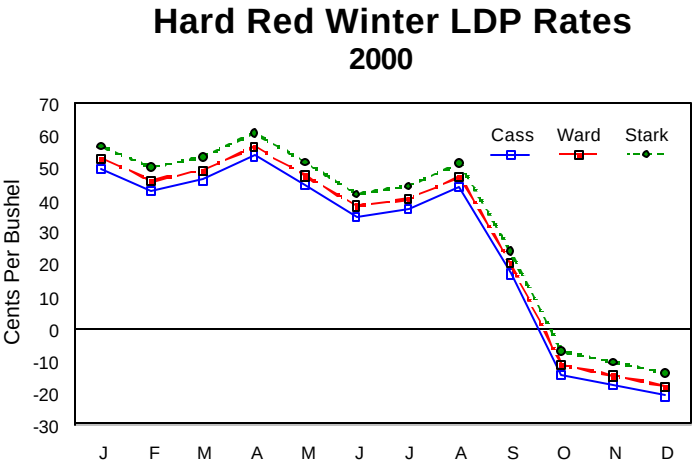

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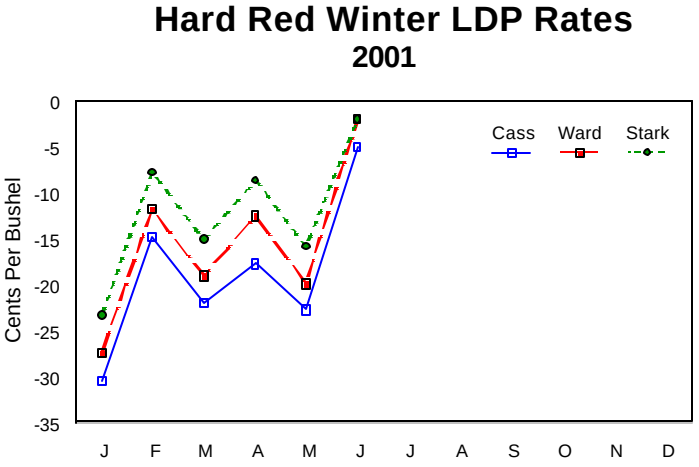

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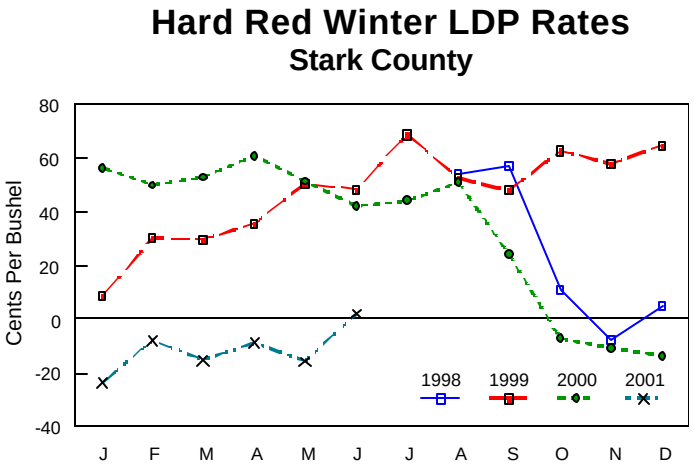

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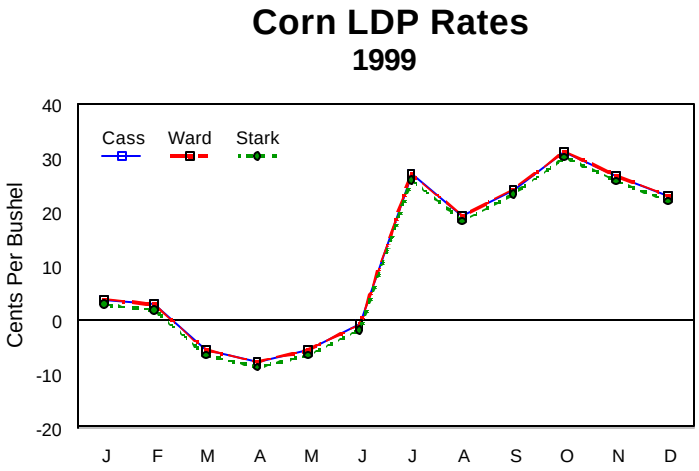


Figure 17

Corn

The LDP rates for corn were generally the highest during the summer in the year following harvest for the 1998 and 1999 crops (Figures 16-20). They were the highest during July 1999 for the 1998 crop and during August 2000 for the 1999 crop. For the 2000 crop, they were nearly the highest at harvest. The LDP rates were also substantial at harvest during 1998 and 1999.

Taking the LDP at harvest would have been the most profitable for all three years when marketing decisions are examined. Selling off the combine would have been the most profitable for the 2000 crop. For the 1998 and 1999 crops, storage until May was more profitable than selling off the combine.

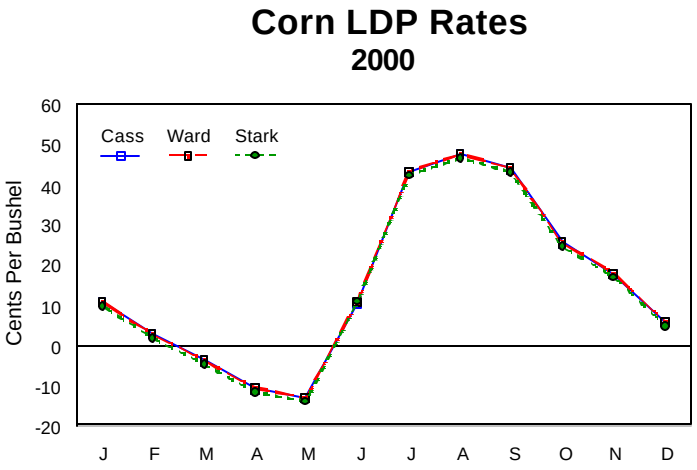


Figure18

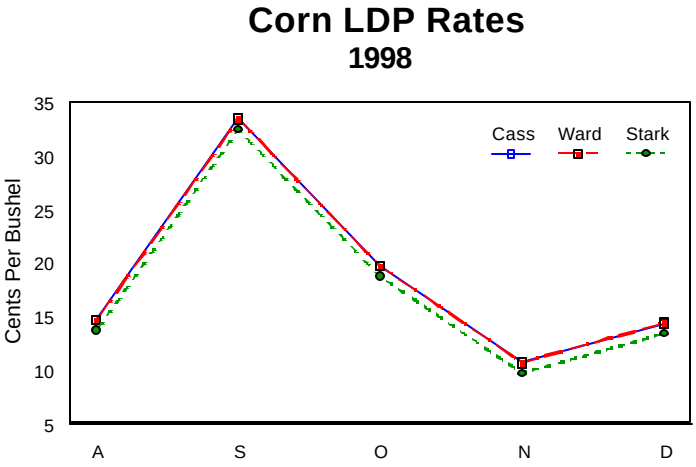


Figure 16

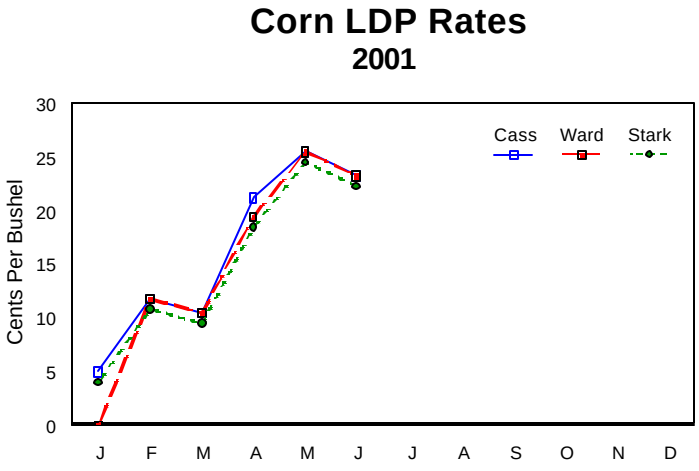


Figure 19

Corn LDP Rates
Cass County

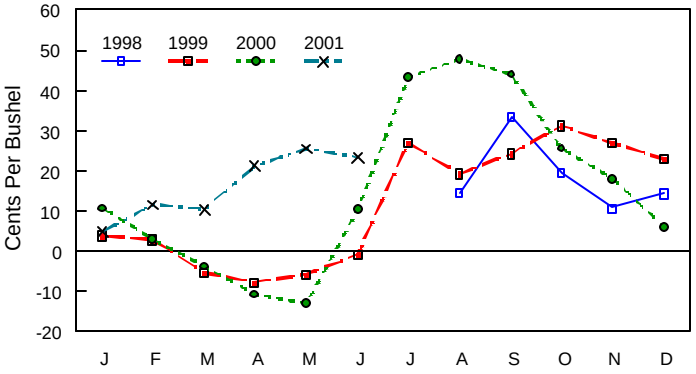


Figure 20

Barley LDP Rates
1999

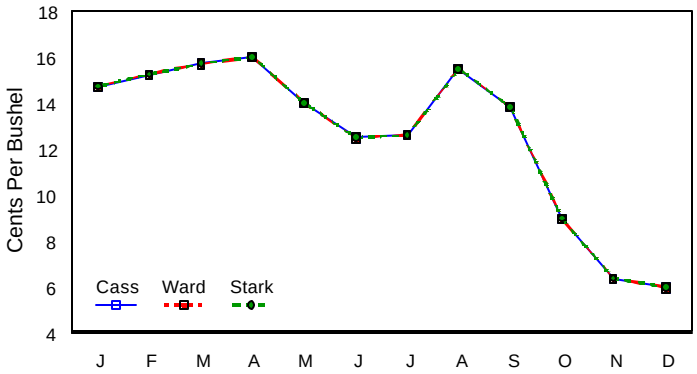


Figure 22

Barley

The barley LDP rates were the same at the three locations (Figures 21-25). The August-September rates were generally the highest. Capturing the LDP at or shortly after harvest was the best strategy. Cash sales during October-December were generally the best for feed and malting barley. Harvest sales of feed barley may have been the best in 1998 depending on the timing of harvest.

Barley LDP Rates
2000

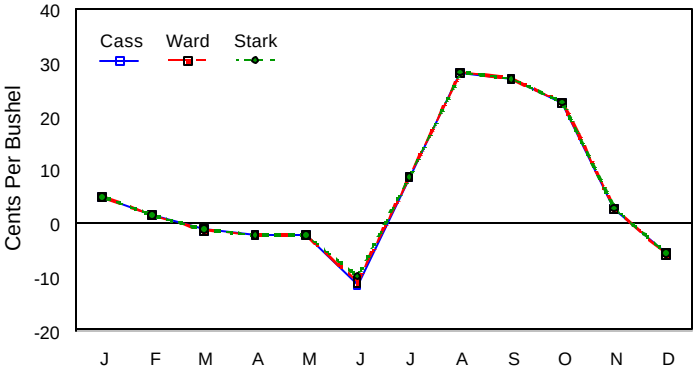


Figure 23

Barley LDP Rates
1998

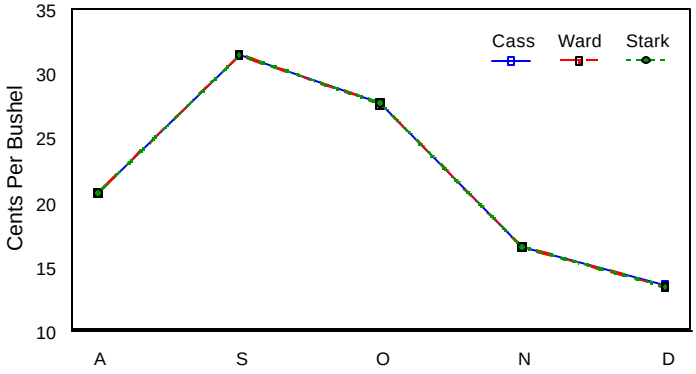
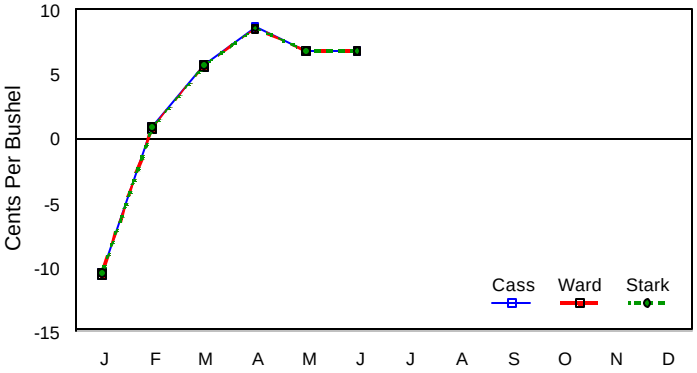


Figure 21

Barley LDP Rates
2001



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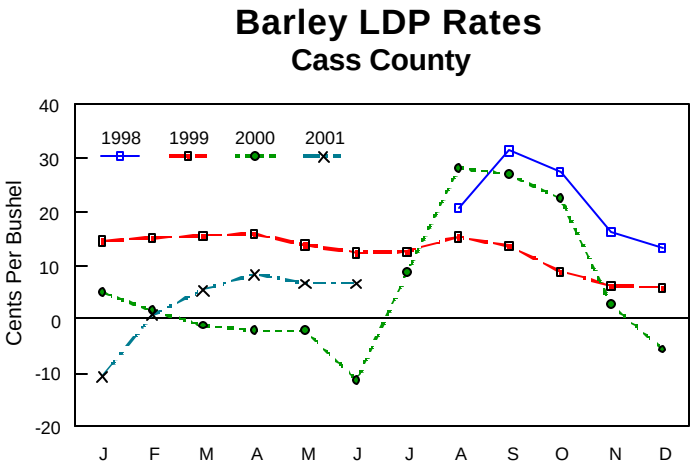


Figure 25

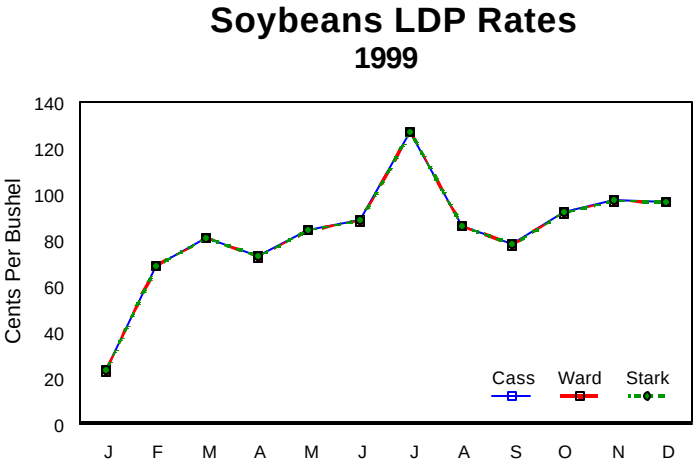


Figure 27

Soybeans

The highest LDP rates for soybeans varied considerably (Figures 26-30). They were the highest during July 1999 for the 1998 crop, during November 1999 for the 1999 crop, and during April 2001 for the 2000 crop. For the 1998 crop, they were significantly lower at harvest than at their highs. However, capturing the LDP at or shortly after harvest was the best strategy considering marketing decisions.

Selling off the combine was the best marketing strategy for 1998 since prices declined considerably during the balance of the marketing year. Storage was profitable for the 1999 crop until May and for the 2000 crop until December.

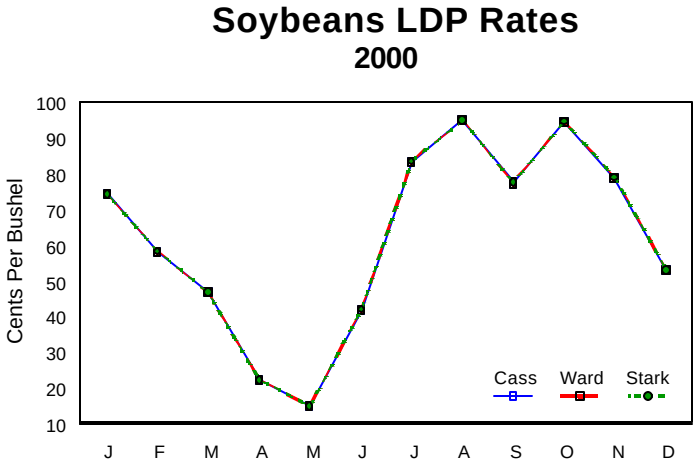
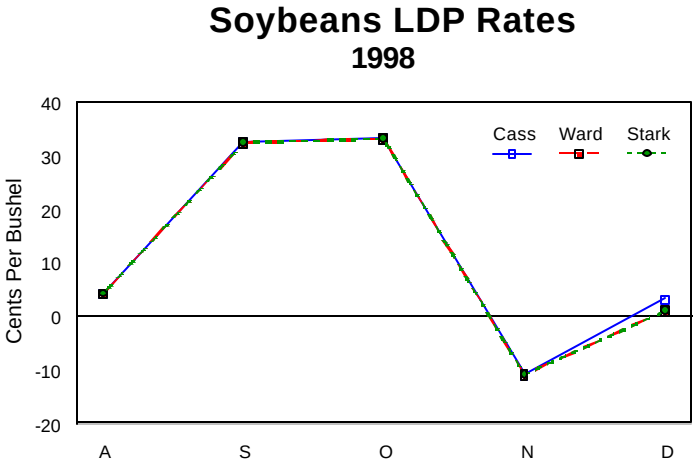


Figure 28



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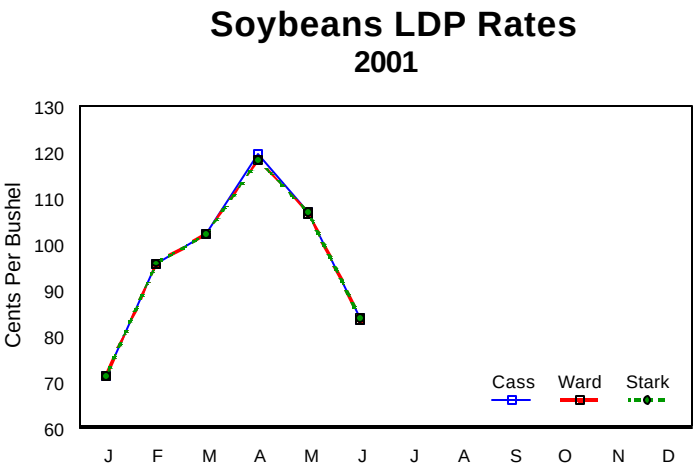

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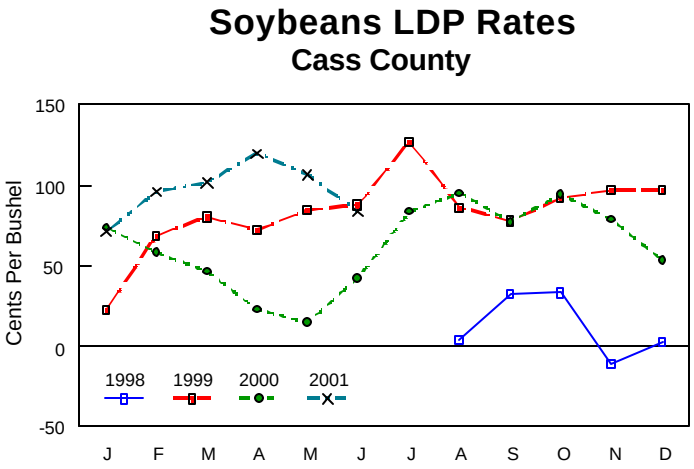

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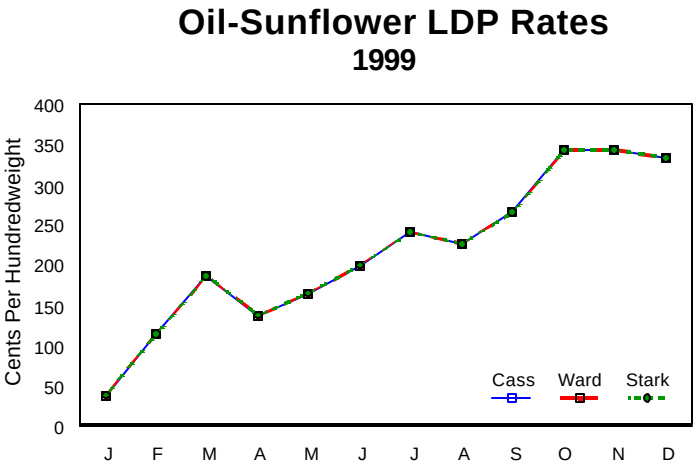

Figure 32

Oil-Sunflowers

The highest LDP rates for oil-sunflowers occurred at or shortly after harvest during two out of three years (Figures 31-35). For the 1998 crop, rates climbed considerably during 1999. In contrast, the highest rates occurred during October and November for the 1999 and 2000 crops.

Since LDP rates and market prices move inversely, the most profitable strategy during the three years was to take the LDP at harvest. The best selling strategy was to sell off the combine during 1998 and 1999. Storage into the summer of 2001 was profitable for the 2000 crop.

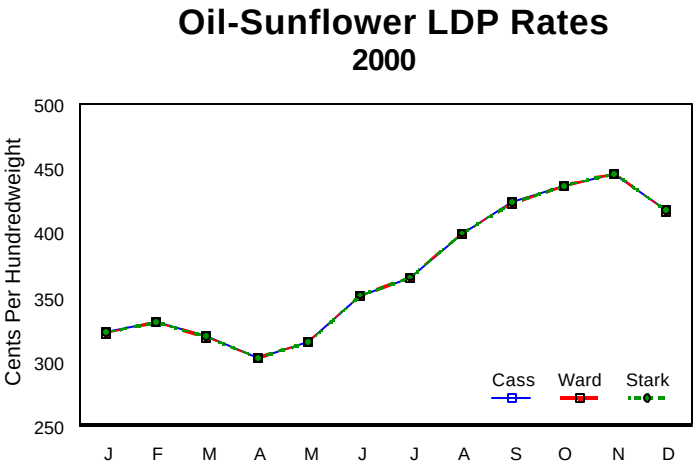

Figure 33

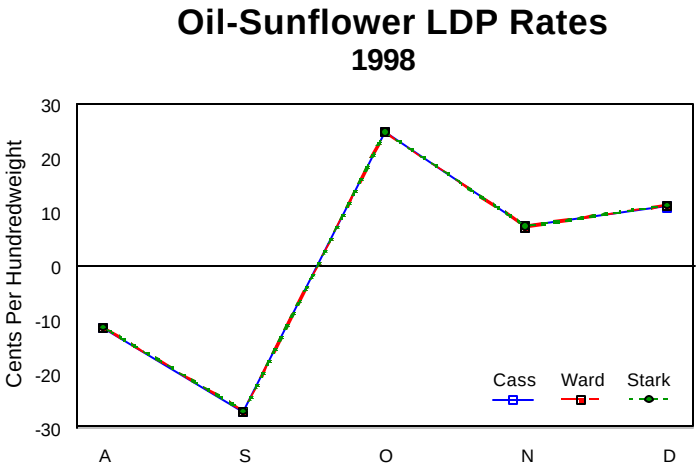

Figure 31

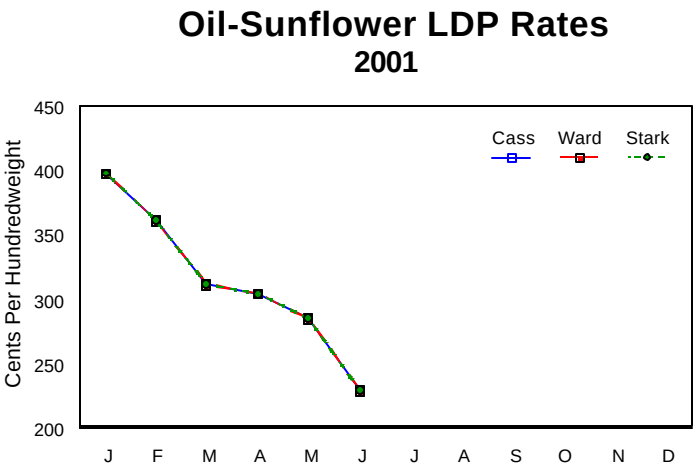

Figure 34

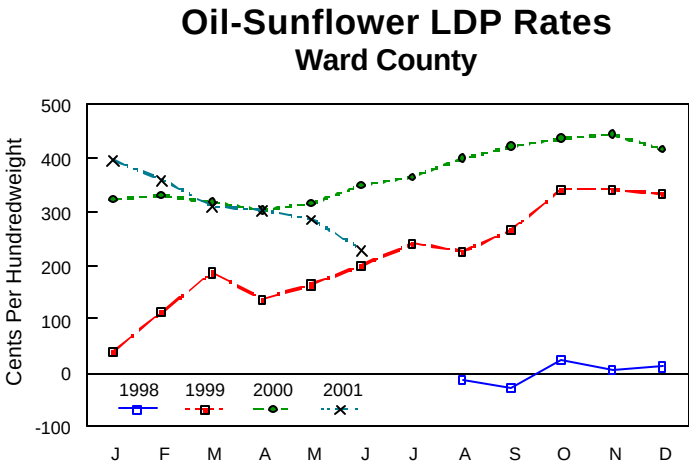

Figure 35

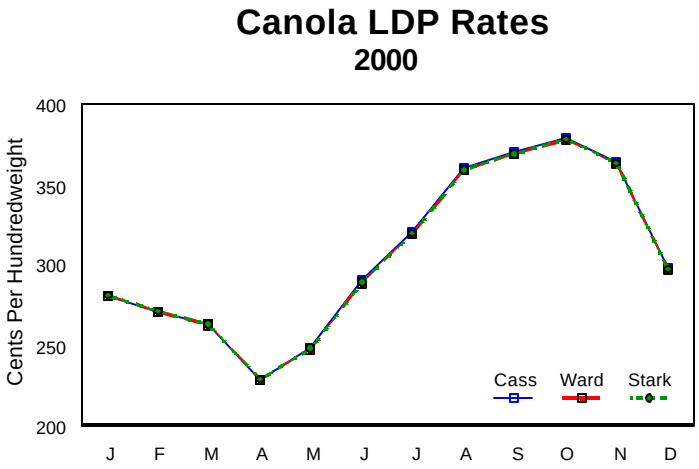

Figure 38

Canola

The situation for canola (Figures 36-40) was similar to that for oil-sunflowers except for the 1998 crop. The most profitable time to sell that crop was January.

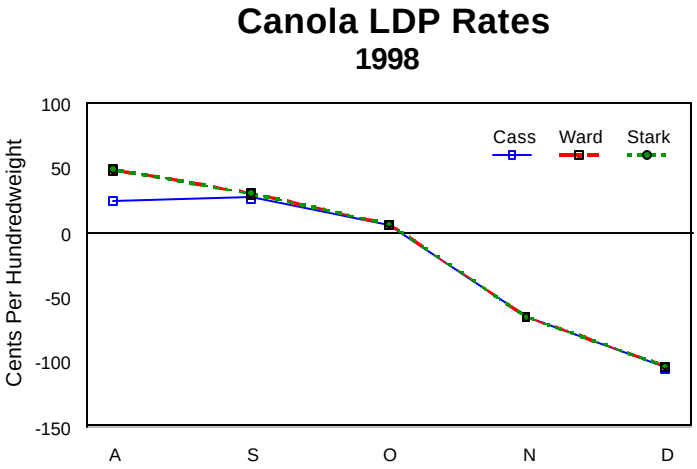

Figure 36

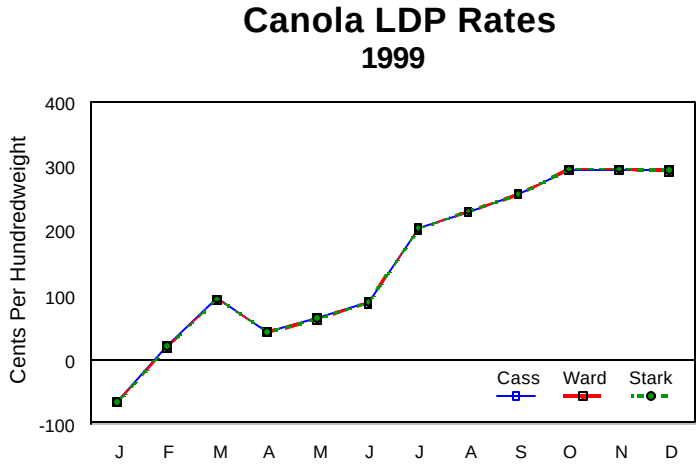

Figure 37

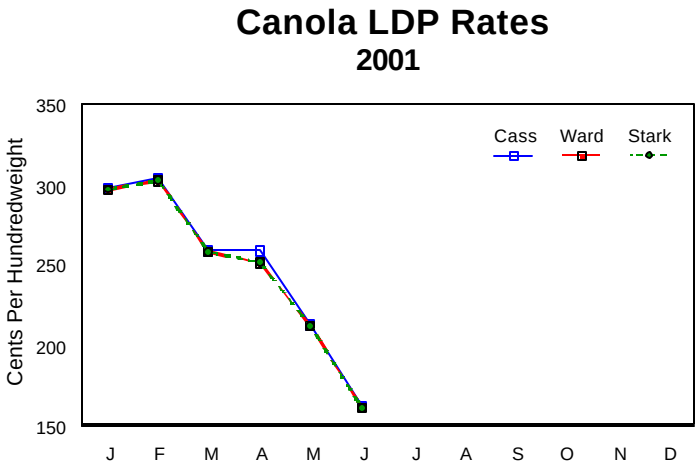

Figure 39

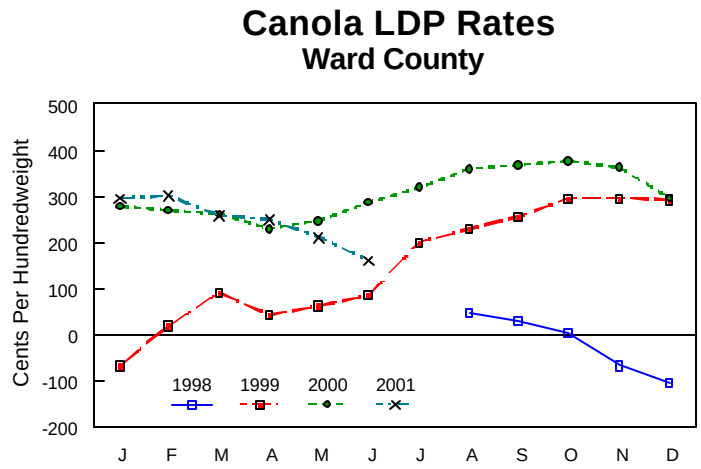

Figure 40

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