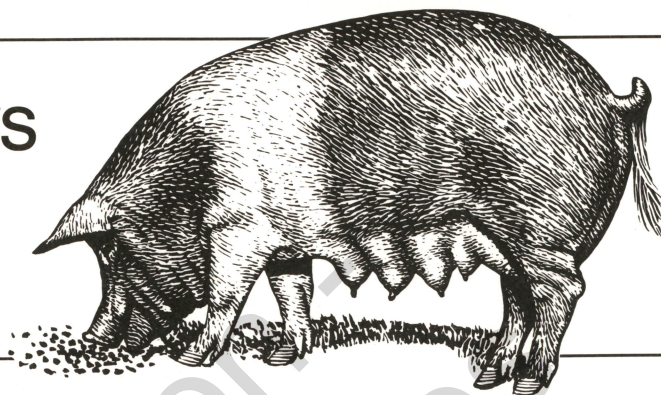


# AGRICULTURAL GUIDE

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## Marketing cull sows

Ronald L. Plain  
Department of Agricultural Economics  
College of Agriculture



Swine producers often ask, "What do I do with my cull sows? Should I move them to market as soon as possible or should I feed them for a few weeks? If I do feed, how many weeks is best?"

The answer is the same as for most marketing questions—it depends. In this case, you should consider four factors before making a decision about when to market sows.

### Condition of the sow

When you're trying to determine whether to feed, probably the most important factor is the condition of the sow when the litter is weaned. Light, thin sows that lost a lot of weight during lactation are usually better prospects for feeding than heavy sows.

Two primary reasons for feeding cull sows are: 1.) to allow them time to dry up to avoid any discount on wet sows, and, 2.) to let them gain back some pounds lost during lactation. Two pretty good reasons! Light sows often receive a larger discount for being wet than heavy sows. They also usually regain lost weight faster on less feed.

It usually requires about a week of feeding after weaning to avoid a discount for wet sows. Unfortunately, the sow may not gain much weight during that first week. In fact, research indicates a sow will **lose** about 3 to 8 percent of her body weight during the first week after weaning, even if she is on a self-feeder.

Figure 1 illustrates a typical growth curve for a post-weaning sow. She will usually lose weight for about a week, gain weight very rapidly for one to two weeks and then finally gain weight more slowly. Of course, there is a great deal of variation among sows.

In general, the older and larger an animal is, the worse its feed conversion becomes. Very young pigs can gain a pound of body weight on less than 2

pounds of feed. As the pig matures, it requires more feed per pound of gain. A 200-pound pig needs about 4 pounds of feed per pound of gain. A mature sow on full feed may eat 10 to 12 pounds of feed per pound of gain **except** when compensatory gain is involved.

Compensatory gain is the rapid recovery growth that usually occurs after an animal has lost weight. This growth is frequently very rapid and feed efficient. It is compensatory gain that makes sow feeding profitable.

For sows, this rapid growth phase usually begins about one week after weaning and continues until she regains most of the lost weight. Once compensatory gain stops, it is probably time to market the sow. The sow may still appear to be doing well, but it is probably because of the tremendous amount of feed she is eating. It is hard to make money with feed conversion rates of 10 to one.

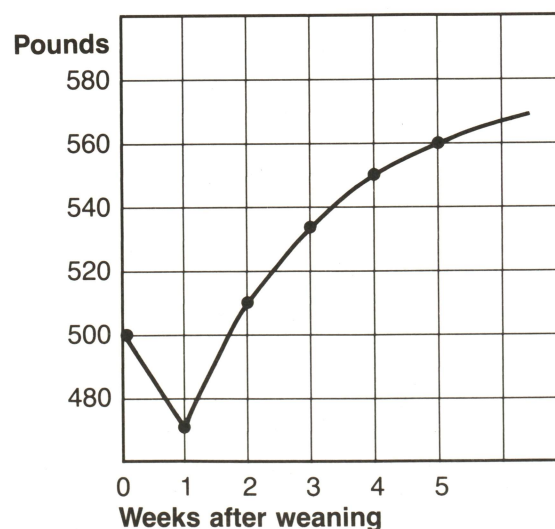
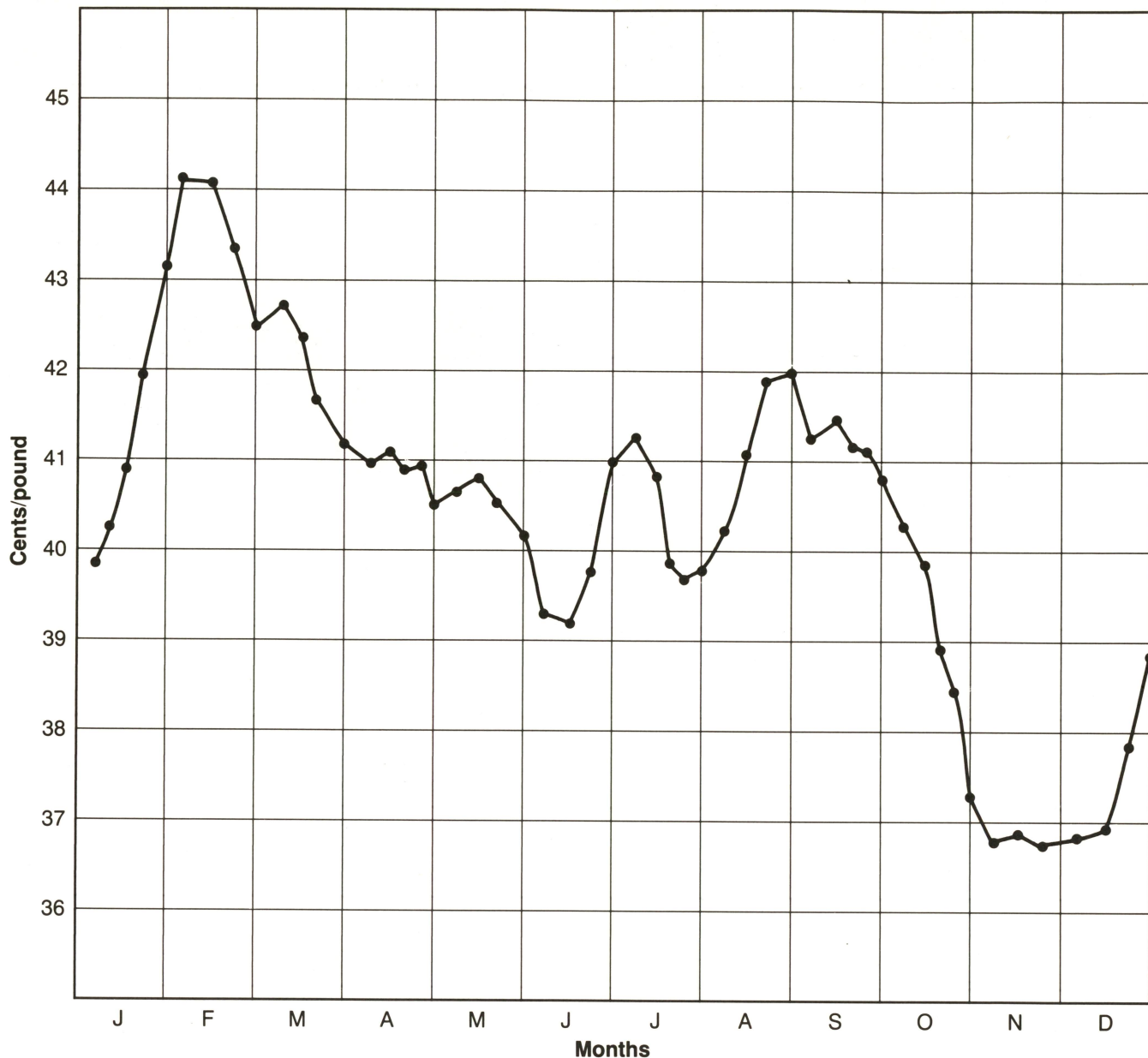


Figure 1. Average post-weaning growth of 500-pound sows

Figure 2. Average sow prices, seven markets, 1976-85



### Expected change in sow prices

The second factor to consider is expected changes in sow prices. You know you may have to take a discount of a dollar per hundredweight or more if you choose to market wet sows. So you can usually increase your sale price simply by holding the sows until their udders dry up.

You must also anticipate changes in sow prices. These changes can be difficult to accurately forecast, but they usually follow market hog price movements. Sow prices tend to have a seasonal pattern, as do market hog prices. They tend to rise in summer and winter and decline in spring and fall.

Figure 2 shows the seven-market average weekly price for sows during 1976-1985. As it shows, the most likely periods for increasing sow prices are mid-December through mid-February, June and Au-

gust. The periods from mid-February through May and from September to early December are characterized by declining sow prices. Of course, there is no guarantee the future will be just like the past, but seasonal patterns are hard to break.

During periods of rising prices, feeding cull sows is beneficial because you're avoiding the discount on wet sows, you're exploiting compensatory gain and you're receiving the benefits of a rising market.

### Price of feed

The third factor to consider is feed cost. For any swine operation, feed is the major cost. In choosing to feed cull sows, you're betting the value of the weight gain will be more than the feed and other costs.

Table 1 estimates the net gain from feeding a 500-pound cull sow as compared to selling her as a wet sow immediately after weaning. Feeding periods of one to five weeks are illustrated at feed costs of 6, 8 and 10 cents per pound. In Table 1, the price received for fed sows is either equal to the base price for wet sows or 1, 2, or 3 dollars above the initial price of wet sows. The cost of labor, interest, facilities and other non-feed expenses is set at 1 dollar per sow per week. The rate of gain and feed conversion used in calculating Table 1 are shown in Table 2.

As you would expect, feed cost and changes in sow prices are the keys to net gain. Returns vary greatly case-by-case, but they tend to be maximized after about three weeks of feeding.

### Ease of handling

The fourth item to consider is how easily sow feeding fits in with your current situation. To profitably feed cull sows, you must have adequate facilities and labor available. During the summer, sows may require supplemental cooling to achieve satisfactory rates of gain. Proper bedding is important during cold or wet weather.

It's also important to remember sow prices could decline during the feeding period. If sow prices drop sharply, no amount of compensatory gain will offset the loss. If you cannot handle the risk, selling wet sows may be the best option.

### Summary

Hog farmers have a choice every time they cull a sow: to feed or not to feed. Sometimes, selling wet sows is the best choice—if you are short on facilities, have heavy sows that lost little weight during lactation, have high feed costs or expect a decline in sow prices.

However, in general, it appears a two-to-four week feeding program can be profitable, especially when you expect seasonal uptrends in prices. Beyond four weeks, however, you probably will receive little added compensatory gain and consequently feed conversion should drop sharply. Any added profit will have to come on the strength of rising sow prices.

Table 1. Estimated gain from feeding a 500-pound cull sow (Dollars per sow)

Weeks Fed After Weaning	Increase in Price Over "Wet Sow" Price \$/Cwt.	Price of Sow Feed (¢/Lb.)		
		6	8	10
1	0.00	-15.52	-16.36	-17.20
1	1.00	-10.82	-11.66	-12.50
1	2.00	- 1.42	- 2.26	- 3.10
1	3.00	12.68	11.84	11.00
2	0.00	- 3.88	- 5.84	- 7.80
2	1.00	1.22	- .74	- 2.70
2	2.00	11.42	9.46	7.50
2	3.00	26.72	24.76	22.80
3	0.00	.92	- 2.44	- 5.80
3	1.00	6.27	2.91	- .45
3	2.00	16.97	13.61	10.25
3	3.00	33.02	29.66	26.30
4	0.00	.64	- 4.48	- 9.60
4	1.00	6.14	1.02	- 4.10
4	2.00	17.14	12.02	6.90
4	3.00	33.64	28.52	23.40
5	0.00	- 2.00	- 9.00	-16.00
5	1.00	3.60	- 3.40	-11.40
5	2.00	14.80	7.80	- .20
5	3.00	31.60	24.60	16.60

Table 2. Typical weights and feed consumption by a 500-pound cull sow

Weeks Fed After Weaning	Sow Weight	Feed Consumed (Lb.)
0	500	0
1	475	42
2	510	98
3	535	168
4	550	256
5	560	350

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