Cows in a BCS of 5 or Better at Calving will:

- Better withstand adverse environmental conditions
- Realize higher calf survival rates
- Conceive 90 days or less after calving

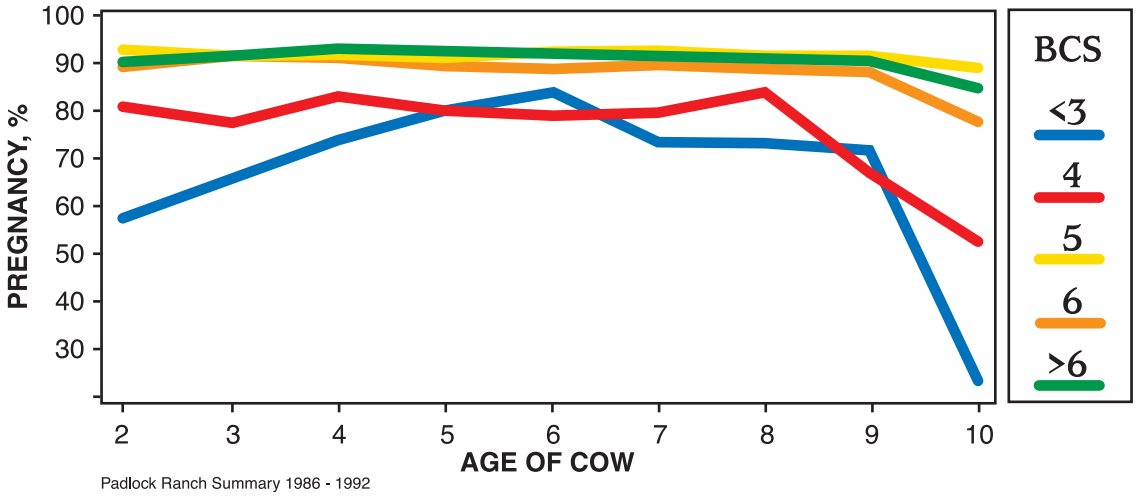
Management Strategies to Alter Body Condition

- Sort cows and heifers by age and nutritional requirements and feed accordingly prior to important productivity periods.
- Develop a calving season which is consistent with forage resources, labor resources and marketing targets.
- Select for production that fits your environment.
- Control parasites and diseases.

FIGURE 3.

A Strong Case for Herd Sorting

The Effects of BCS and Cow Age on Pregnancy Rate



Padlock Ranch Summary 1986 - 1992
Cherni, 1993

Figure 3 illustrates:

- Pregnancy rates of younger and older cows are impacted to a greater extent than prime-aged cows (4 to 8 years of age) at similar body condition scores.
- Regardless of age, cows in a body condition score of 5 or greater at calving have an excellent chance of becoming pregnant.

Feeding Strategies to Alter Body Condition

- Identify forage supply by quantity and quality.
- Submit forages for nutrient analysis determination.
- Save best feed for young or thin older cows.
- Feed lower quality forages to prime age, good condition cows.
- Allow sufficient time for realistic gains to avoid problems.

Economic Benefits of Feeding Beef Cows By Body Condition

The following example (based on industry and research findings) was developed to illustrate the economic advantages of sorting and feeding cattle by body condition score. The following assumptions were made:

1. Cow herd age distribution (per 100 cows) based on North Dakota State University CHAPS records (Helmuth, 1995; 1987-1991).
   A. 63 head or 63% are prime aged cows averaging body condition 5 (Good).
   B. 37 head or 37% (32 young and 5 old cows) averaging body condition 4 (Thin).
2. Dormant native grass, prairie hay, grain and 38% commercial protein supplement are feed sources used.
3. Moderate calving weather.

	Feed as One Group **Feed the entire herd as one group** 100 days prior to calving with the primary goal of targeting the feeding level to maintain BCS 5 despite the fact 37 head are BCS 4. **Body Condition**		**Split Feed** **Split the herd based on body condition score and feed differently** 100 days prior to calving. Feed the 63 head of prime-aged females to maintain body condition 5 and feed the remaining 37 head (32 head young and 5 head older cows) to improve one BCS (body condition score 4 to 5). **Body Condition**		
Item	**Thin**	**Good**	**Thin**	**Good**	**Dollars Difference**
Year 1					
100 day pre-calving BCS	4	5	4	5	
Calving body condition	4	5	5	5	
Number cows/age group	37	63	37	63	
Feed Cost (100 days)	**$6,739**		**$7,364**		**($625)**
Additional labor required			**50 hours**		**($400)**[a]
Calf survivability rate, %	92%	97%	97%	97%	
Total weaned calves	**95**		**97**		**$770**[b]
Year 2					
Estimated pregnancy %	80%	95%	95%	95%	
Total Number Pregnant Cows	**90**		**95**		**$1000**[c]
Additional weaning weight			**879 lbs.**		**$483**[d]
Net return per 100 cows					**$1228**
Net return per thin cow					**$33.19**

[a] An additional half hour labor per day @ $8/hour (includes benefits).
[b] 550 lb. calf sold @ $70/cwt.
[c] Market premium for pregnant vs. open cows $200/pregnancy.
[d] 35 calves born 10 days earlier x 2.5 lbs. weight/day of age @ $55/cwt.

In this example, feeding cows in two separate groups nets $1,228 more per 100 cows than group feeding. Because it is impossible to predict future environmental fluctuations, producers should split-feed by body condition to insure cows are body condition 5 by calving.