

B O D Y
C O N D I T I O N
SCORING GUIDE



I N T R O D U C T I O N

Body condition is one of the important indicators of your operation's success. Evaluating body condition can tell you quite a bit about your herd's recent past, present and near future. The amount of flesh each cow carries relates directly to her ability to produce milk, reproduce in a timely interval, and to her longevity in the herd. Changes in body condition, particularly rapid ones, are vitally important indicators of herd health and management.

Whether fat or thin, cows at either extreme are at risk for metabolic problems and diseases, decreased milk yield, poor conception rates and difficulty calving. Cows that calve with excess body conditioning actually eat less than thinner cows. And thin cows will not have sufficient body reserves to fuel milk production to their genetic potential, nor will they be able to quickly regain reproductive efficiency.

Accurately assessing where an individual cow stands relative to the ideals for her stage of lactation is crucial. To establish the benchmarks for herd condition evaluation, researchers use a 5-point scoring system, where an extremely thin cow scores a "1" and a score of "5" would be given to an obese cow.

This system, developed at Virginia Polytechnic Institute and State University, allows individual cows to be evaluated using the same, objective standards. This simplifies discussions of ideal condition at various stages of lactation and eliminates inconsistencies resulting from geographical location or individual prejudices.

Milking frequency (3x or 2x) doesn't change the target body condition score.

More frequent milking means feed management needs to be better to achieve desired body condition.

Ideally, 80% of the herd should lose no more than one-half a condition score between calving and 30 days in milk. This goal can be achieved through good nutritional management and feeding practices.

Cows should be scored every time they are handled for a reproductive function — calving, postpartum exams, insemination, pregnancy check — and then again late in lactation, and at dry-off. If individual cow scoring is impossible, score a representative sample of at least 20% of the cows in each group. Include aged cows and heifers, and cows that have recently entered the group as well as those that have been there for several weeks. Calculate an average body condition score and compare this to the ideal goal. If the range is very broad within one cow group, move the fringe cows to higher or lower groups.

A typical, aged cow — once she is out of negative energy balance, typically around 50-60 days in milk — will begin to gain 4 - 5 pounds of weight per week. If we consider that one condition score represents about 120 pounds in a mature cow, we see that it will take about 6 months to regain a full condition score. First-calf heifers, because they are still growing, need an additional 30-40 pounds of gain factored into their weight recovery.

Copies of the body condition score sheet on the last page should be kept for each cow, or cow group. Comparisons over time help determine how well the herd is managed and predict the herd's income potential.

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TARGET BODY CONDITION SCORES		
Stage of lactation	Ideal score	Range
Dry	3.50	3.25 - 3.75
Calving	3.50	3.25 - 3.75
Early Lactation	3.00	2.50 - 3.25
Mid Lactation	3.25	2.75 - 3.25
Late Lactation	3.50	3.00 - 3.50
Growing Heifers	3.00	2.75 - 3.25
Heifers at Calving	3.50	3.25 - 3.75

Body condition scoring is done by feeling the amount of flesh covering the loin, rump and tail head areas. The animal should be standing on a level surface. Begin with an overall visual assessment of the total body condition. Next, feel the short rib area, noting how the flesh follows the bone ends and makes a “scalloping” pattern, and run your hands along the ribs to the backbone.

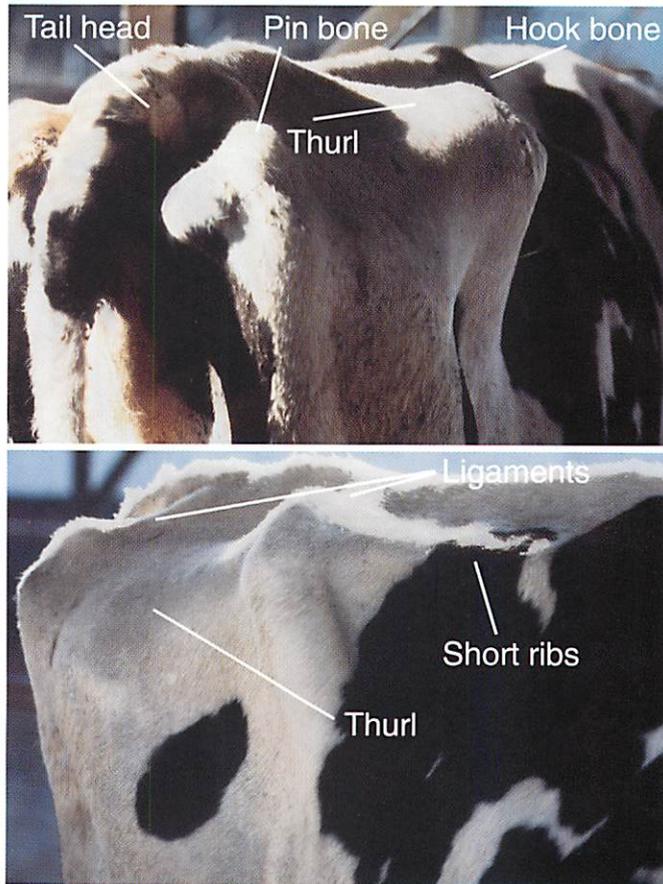
Follow down the backbone, noting the amount of fat between and around each vertebra, to the ligaments attaching the hook bones to the backbone. Move away from the back, along the ligament, to the hook bone. Run your hand over the bony knob and then follow the thurl to the pin bone. Assess the amount of flesh covering the hook and pin bones and the amount of “dishing” between them. For the final step, move your hand from the pin bone up to the tail head and feel the fat covering.

Do not consider frame size, stage of lactation and health when assigning a condition score. These factors are considered when interpreting condition scores, but never

in determining a score.

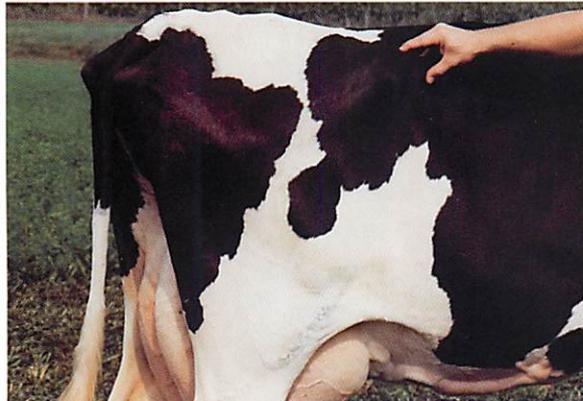
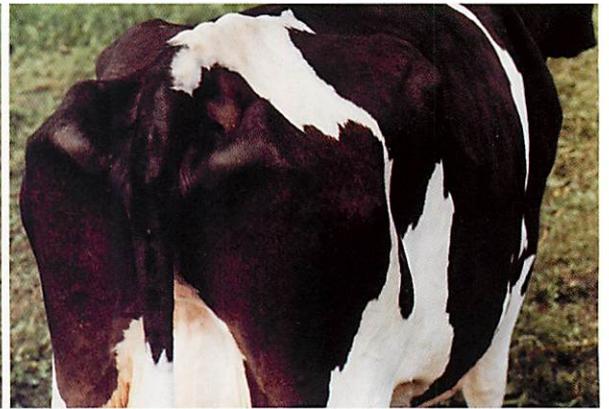
When learning to condition score, it is necessary to feel the amount of flesh covering the key indicators — hook and pin bones, ligaments holding hooks and pins to the backbone, and the tail head. This “hands-on” method may be dropped once the scorer has the ability to mentally make comparisons using only visual clues. However, “recalibrating” by physically scoring a few cows before relying on sight alone helps ensure accuracy.

Studies in England prove a reliable correlation between these external points and internal fat stores.



This cow, with a body condition score of 1.5, is ideal for demonstrating the key indicators, but little else. Each vertebra is sharp and distinct along the backbone. The short ribs are also visible as individual bones. The ligaments connecting the sharp and well-defined hook and pin bones to the backbone are easily seen. Her thurl is extremely dished in and the area on either side of the tail head is sunken and hollow. There are folds of skin in the depression between the tail bone and pin bone.

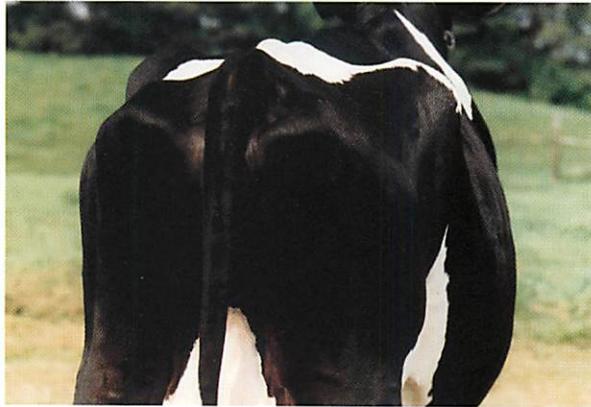
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▲ This cow is too thin. She may be in good health, but her reproduction and milk production may suffer from a lack of body condition. Her backbones are easily seen, but they do not stand out as individual vertebrae. The short ribs are also distinct and the scalloping at the edge is very apparent. The thurl is very hollow, with prominent hook and pin bones. The ligaments holding these bones to the back are very sharp and distinct. The spot where the thigh bone meets the pelvis is obvious, but unlike the BCS 1.5 cow, there is a little flesh here. The area on either side of the tail head is hollow with folds of skin in the depression formed by the pelvis and tail.

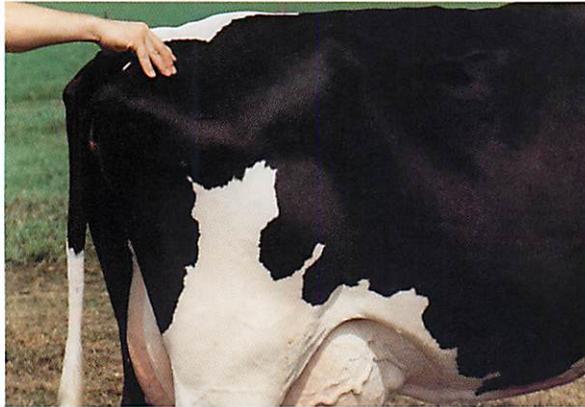


2.5



▲ The vertebrae are still prominent in a cow scoring midway between a 2 and 3. However, they cannot be seen as individual bones. Individual short ribs are easily counted and the ligaments holding the hooks and pins to the backbone are rigid and obvious. There is a bit more roundness to the hook bone than in the BCS 2 cow, but it is still sharp. Her thurl is very dished and the pin bone protrudes. The area on either side of the tail head is hollow, but not to the degree as the BCS 2 cow. This is the lowest condition score that should be seen in a well-managed dairy operation. Ideally, less than 10% of the herd should score 2.5.

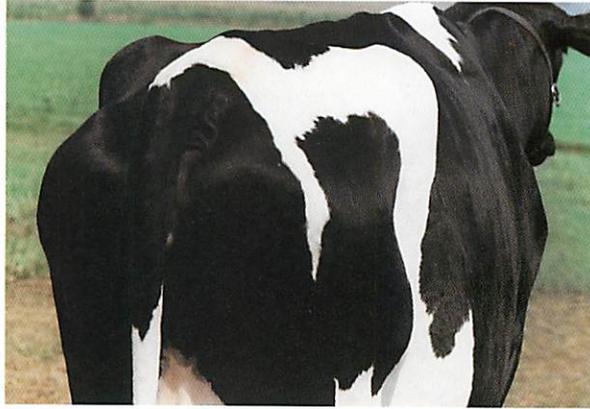
3.0



▲ This cow is in ideal condition for most stages of lactation. The vertebrae are rounded, but the backbone can still be seen. There is between a half-inch and an inch of tissue covering the short ribs. The edges of the ribs are rounded and not as sharp as the BCS 2 and 2.5 cows. Hook and pin bones are easily seen, but are round instead of angular. The ligaments connecting them to the backbone form clear boundaries between the forward and rear pelvic areas, but the fat covering makes them appear smooth and round. The thurl is dished, but not to the same extent as in the thinner cows. The area on either side of the tail head is hollow, but the folds of skin are not as distinct.



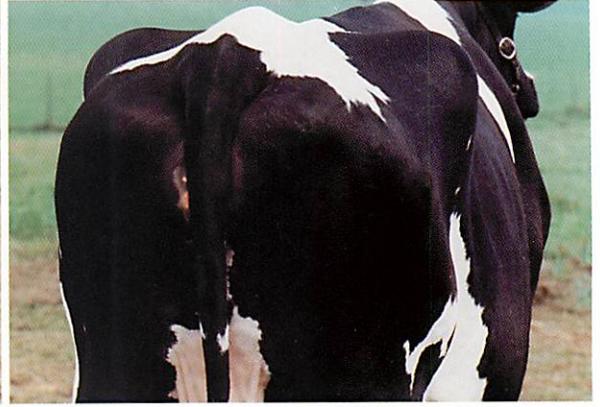
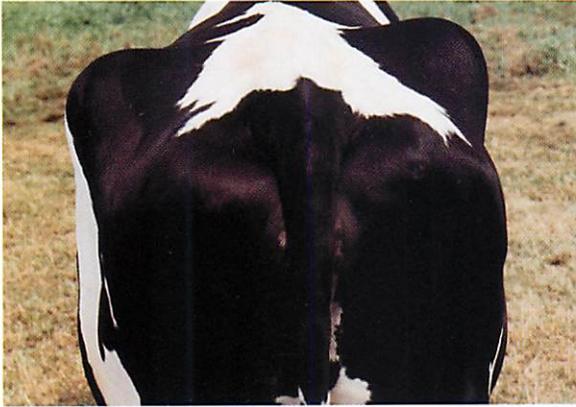
3.5



▲ This cow is near the upper limit of body condition throughout most of lactation, but is ideal for the dry period and calving. This is also the condition goal for first-calf heifers. You feel more stored fat over the backbone, the short ribs and covering the ligaments attaching the hook and pin bones. The hooks and pins are well-rounded and smooth. The thurl is slightly dished. There is a slight ridge on the shelf made by the short ribs. The area on either side of the tail head is rounded and filled in, but without appearing fat.



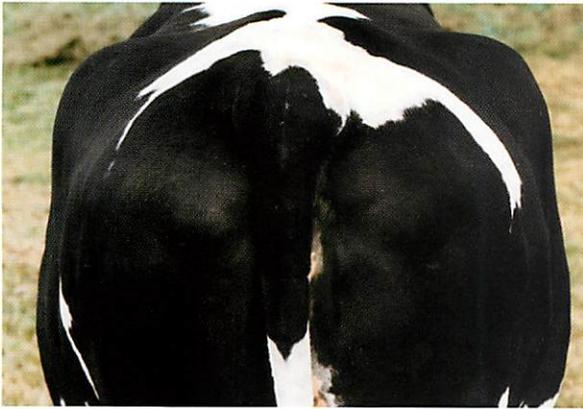
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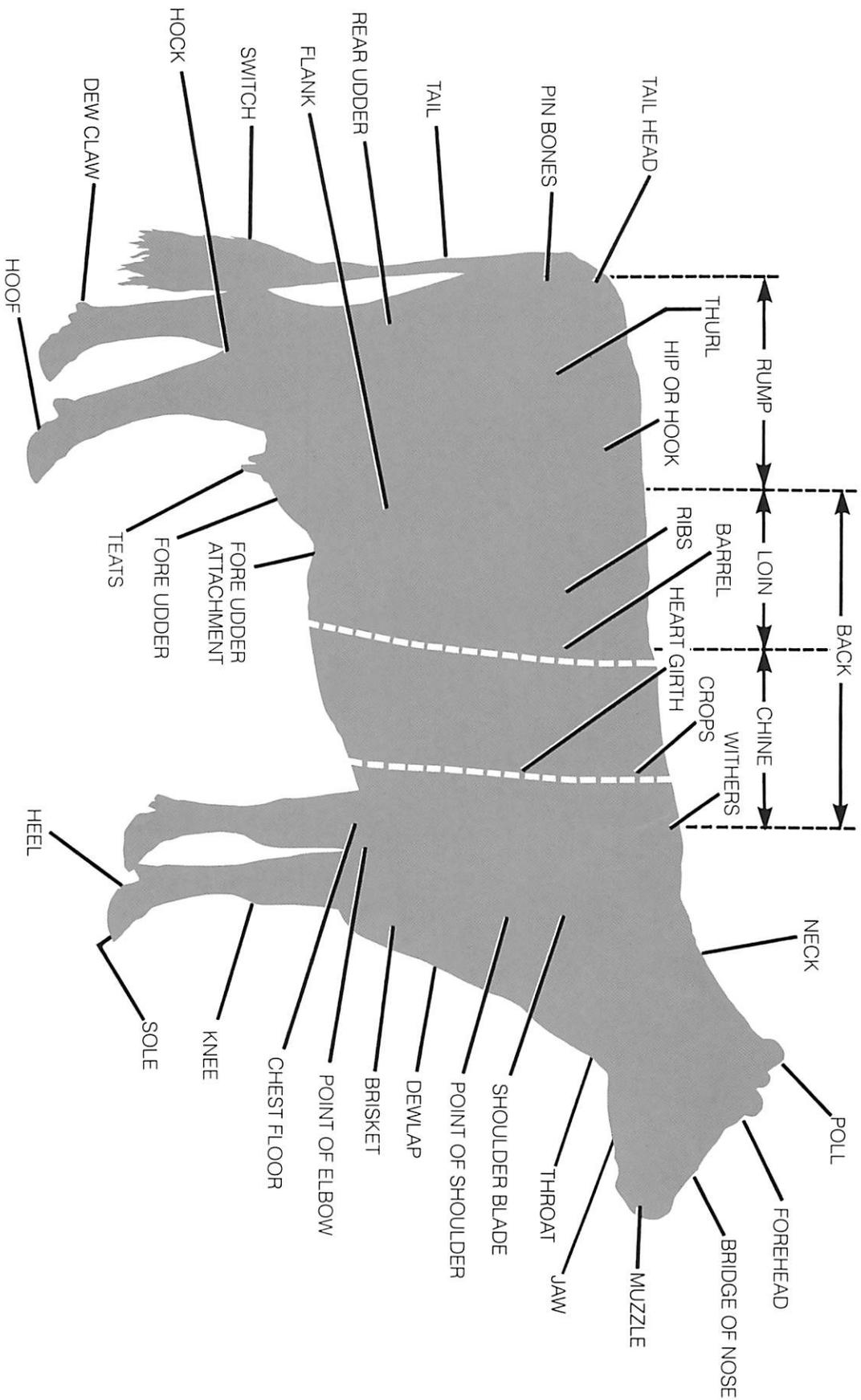
▲ Although many producers want their cows to be this heavy at calving, research here and in England shows that fat cows lose more condition, eat less and have more post-calving problems than cows that freshen a half a condition score lower. A BCS 4 cow looks fleshy. Her back appears almost solid, like a table top. The short ribs still form a shelf, but they cannot be seen as individual bones and only felt with deep palpation. The hook and pin bones are rounded and have obvious fat padding. The area on either side of the tail head is not hollow and there are no skin folds.



50



▲ This is an obese cow. She is at high risk for metabolic problems, lameness, and will most likely remain open for months at a time. Her backbone and short ribs cannot be seen and only felt with difficulty. The shelf formed by the short ribs is well-rounded. Her thurl is filled in. The hook bone looks like a ball and the pin bone is buried in flesh. Fat deposits at the tail head give her a dimpled appearance.





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