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- Page 7: Overview of all the body condition scores for Elk.
 Each body condition score will have an illustration to
 match and describe what you should be looking for in
 determining the body condition score of your animals.

BODY CONDITION SCORING AND ELK

What's the Score.

BODY CONDITION SCORING CAN HELP ELK producers manage their herd for optimal health, production, and profitability. **Body condition** refers to the amount of fat that an animal is carrying. **Body condition scoring** is a system designed to estimate the amount the fat that the animal has. It is a useful management tool that helps farmers do a better job feeding their stock.

BODY CONDITION SCORING SYSTEMS

THE FIRST BODY CONDITION SCORING SYSTEM was developed for sheep because producers could not determine how fat or thin a ewe was when she was in fleece. The manual palpation method for determining BCS was developed to overcome this problem. This system was later adapted for use with beef and dairy cattle and later for elk.

The system presented for elk in this article has been adapted from the beef and dairy cattle five-point scale. A body condition score (BCS) of 1 indicates that the animal is very thin. A BCS of 5 indicates that it is very fat.

Since elk are seldom caught in a squeeze to allow a "hands on" body condition scoring system, most of the criteria used to assess the animal are visual clues. While learning how to body condition score elk, it is helpful to feel the elk in a squeeze so that you can feel what you think you are seeing under their thick hair coat. Once a person is experienced in scoring elk, visual clues are adequate.

TARGET CONDITION SCORES

DEAL CONDITION SCORE DEPENDS ON THE TIME of year. Over the different seasons of a year it is normal for an elk's weight and body condition score to fluctuate. Most producers aim to have their elk cows moderately fat prior to rut so that breeding is optimal and moderate in the spring for calving. Elk bulls need to be quite fat going into rut because they eat very little during the month of September. Bulls lose weight over the rut so it is important that they be fed relatively well right after rut to regain some of the lost weight. Over winter bulls are generally fed to maintain their body condition until March when their velvet antlers begin to grow again. At this time their feed in increased and their target body condition is about 3 to 3+.

TIME OF YEAR	IDEAL SCORE	RANGE
September (cows)	3+	3-4
September (bulls)	4+	4-5
November (cows)	3+	3-4
November (bulls)	2+	2-3
March (bulls)	3	3-3+
May (cows)	3	2+-3

By knowing your herd's body condition score, you can adjust your feeding to meet the above targets. If the animals are too thin, increasing the amount or quality of feed and supplements will increase their body condition score. If the animals are too fat, the opposite is possible and money can be saved in the winter feed bill.

One must be aware that any change in BCS should be gradual as rapid changes, either up or down, can cause health problems. Rapid weight loss in fat elk may precipitate health problems. Rapid weight gains on grain diets are possible but this type of diet can cause digestive upsets and may also cause death.

BCS AND BODY WEIGHT

IN ELK, ONE UNIT OF BCS IS ROUGHLY EQUIVALENT to 45-60 pounds of live tissue weight. The approximate composition of this tissue would be 70% fat, 24% water, 6% protein and 1% mineral (adapted from dairy cow research by Otto and co-workers, 1991).

BCS AND REPRODUCTION

Experience indicates that cows that are too fat at calving (BCS > 4), were more prone to reproductive diseases such as difficult calving than cows with lower BCS. Cows that are thin (BCS < 2) experience reduced fertility.

ASSIGNING A BODY CONDITION SCORE

FTEN AN ANIMAL BEING EVALUATED DOES NOT meet the exact criteria of a given BCS but falls somewhere between 2 scores. The evaluator can assign them a value with a "+" sign which indicates that they are slightly more than the score given but not at the level of the next score. For example a cow scoring between a BCS of 2 and a BCS of 3 may be scored as a BCS 2+.

WHY DO I NEED TO LOOK AT MORE THAN ONE AREA ON THE ELK?

THERE IS VARIATION BETWEEN ANIMALS IN HOW they deposit fat. Factors such as age, sex, subspecies differences, and even individual animal variation will affect the score that they exhibit at each of the scoring areas of the body. By scoring several areas and averaging the scores we get a much more accurate overall body condition score for the animal than just using one area. For example an old elk cow may look like a BCS of 2 when looking at her ribs but the other areas indicate that she is a 3. This cow would get an overall score of 3. The following table can be used to score elk in the field.

What's the Score: Elk: BCS Guide Page: 2

This table can be used to score elk in the field.

BCS	RIBS	SPINE (backbone)	HIP BONE & RUMP	TAIL HEAD	BELLY
1 very thin	many ribs visible and prominent in summer; in winter, visible but less distinct	very sharp; angle of muscle is steep: prominent sawtooth appearance on the side view	prominent and edges are very sharp; rump muscles are sunken	devoid of fat; deep sunken depressions on either side of the tailhead; very sharp pin bones; no fat palpable if elk is in a squeeze	tucked up; hollowed out flank with a sharp shelf
2 ^{moderately thin}	many ribs visible in summer but not prominent; in winter, ribs are slightly visible	evident but not sharp; angle of muscle is steep; slight sawtooth appearance on side view	readily seen and edges are sharp; rump muscles are slightly sunken	sunken depressions on both sides of the tailhead; sharp pin bones; small amount of fat palpable if elk is in a squeeze	slight hollowing of the flank and prominent shelf
3 ^{moderate}	may be slightly visible in summer but not sharp or distinct; edges round and covered in flesh; not visible in winter		visible but not sharp; rump muscles are flat and angular	slight hollowing on either side of the tailhead; rounded pin bones; some fat palpable if elk is in a squeeze	with a slight shelf; no fat rolls on belly
4 moderately fat	ribs generally not visible; none visible in the winter	not readily seen; angle of the muscle has a gentle slope	barely visible; muscles are full but not bulging	slight depression beside the tailhead; pin bones are rounded and smooth	flank is full with no shelf; slight rolls of fat beginning to develop
5 ^{very fat}	not visible in winter or summer; covered in fat	not visible and is buried in fat; angle of muscle has little slope and is rounded	covered in fat and is not seen; rump is rounded out and full	no depression on both sides of the tailhead; pin bones are buried in fat and difficult to feel	evident beside the

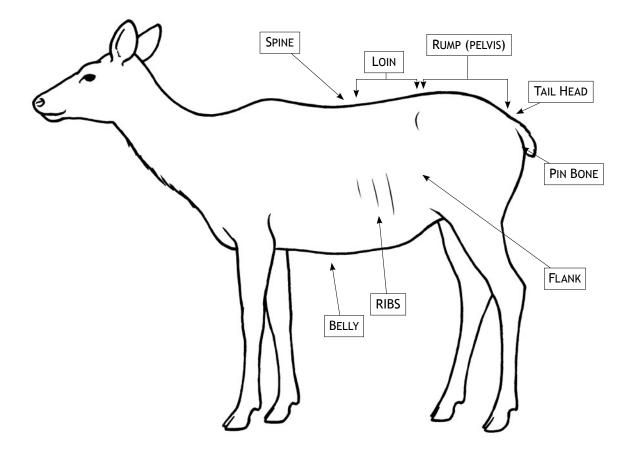


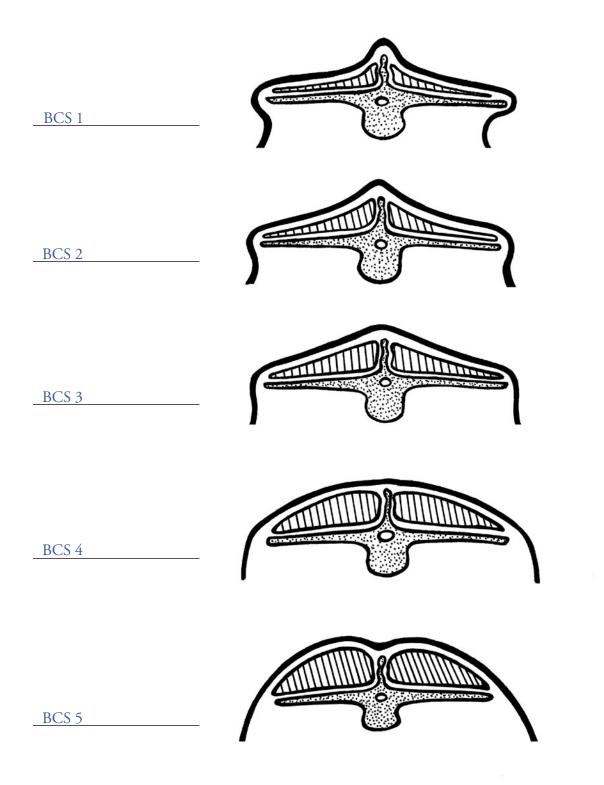
BODY CONDITION SCORING WORKSHEET FOR ELK

Assign a score to each body area and then average the numbers for an overall score.

DATE:	DATE:							
TAG#	RIBS	SPINE	HIB BONE	TAIL HEAD	BELLY	OVERALL		
				1				

Illustration of an Elk with a BCS score of 3.





BODY CONDITION SCORES FOR ELK

Overview of all the body condition scores for Elk

BCS₁

WHOLE BODY

• Thin

RIBS

- Many ribs visible and prominent in summer
- Visible, but less distinct in winter

SPINE

- Backbone very sharp
- Angle of muscle steep
- Prominent sawtooth appearance on side view

HIP BONE AND RUMP

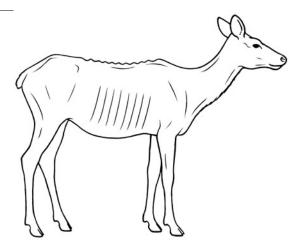
- Hip bone prominent, edges very sharp
- Rump muscles sunken

TAIL HEAD

- Devoid of fat
- Deep, sunken depressions on either side of tail head
- Very sharp pin bones
- No fat palpable

BELLY

- Belly tucked up
- Hollowed out flank, with sharp shelf



BCS₂

WHOLE BODY

• Moderately thin

RIBS

- Many ribs visible, but not prominent in summer
- Slightly visible in winter

SPINE

- Backbone evident, but not sharp
- Steep angle of muscle
- Slight sawtooth appearance on side view

HIP BONE AND RUMP

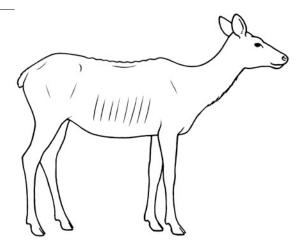
- Hip bone readily seen, edges sharp
- Rump muscles slightly sunken

TAIL HEAD

- Sunken depressions on both sides of tail head
- Sharp pin bones
- Small amount of fat palpable

BELLY

- Slight hollowing of flank
- Prominent shelf





BCS₃

WHOLE BODY

• Moderate

RIBS

- Slightly visible in summer, but not sharp or distinct
- Edges round, covered in flesh
- Not visible in winter

SPINE

- Backbone visible, but not prominent
- Angle of muscle has moderate slope similar to roof of tent
- No sawtooth appearance from side view

HIP BONE AND RUMP

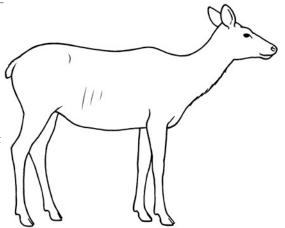
- Hip bone visible, but not sharp
- Rump muscles flat and angular

TAIL HEAD

- Slight hollowing on either side
- Rounded pin bones
- Some fat palpable

BELLY

- Flank has slight depression, with slight shelf
- No fat rolls



BCS 4

WHOLE BODY

• Moderately fat

RIBS

- Individual ribs generally not visible in summer
- Not visible in winter

SPINE

- Backbone not readily seen
- Angle of muscle has gentle slope

HIP BONE AND RUMP

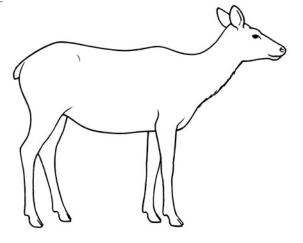
- Hip bone barely visible
- Muscles full, but not bulging

TAIL HEAD

- Tail head filled with fat
- Pin bones rounded and smooth
- Fat easily palpable

BELLY

- Flank full with no shelf
- Slight rolls of fat beginning to develop





BCS 5

WHOLE BODY

• Fat

RIBS

- Individual ribs not visible in winter or summer
- Covered in fat

SPINE

- Buried in fat
- Backbone isn't visible
- Angle of muscle rounded, with little slope

HIP BONE AND RUMP

- Hip bone is covered in fat, not visible
- Rump is rounded out, full

TAIL HEAD

- Tailhead bulging with fat
- Pin bones buried in fat and difficult to feel

BELLY

- Distended belly
- Full flank with no shelf
- Rolls of fat evident beside midline

