

# Body condition scoring method for the blue fox (*Alopex lagopus*)

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## Evaluation of BCS

- Subjective method for assessing the thickness of subcutaneous fat.
- Gives an estimate of fatness independent of the animal's body size.
- Based on visual assessment together with manual palpation.

## Why BCS is needed?

- Farmed blue foxes are fat at pelting time, which increases the risk of health problems related to obesity.
- Attaining and maintaining the ideal BCS is important because fatness
  - has negative impact on blue foxes' fertility traits and litter size,
  - is connected to leg weakness and impaired physical activity.

## Selection potential

- BCS is moderately heritable trait ( $h^2=0.30$ ).
- Main environmental factor influencing BCS is nutrition.

## BCS method is used for guidance of feeding and conditioning of:

- 1) vixens, which will be selected as breeding animals in the summer,
- 2) vixens, which will be selected as breeding animals in the autumn when they are already fat and need heavy dieting,
- 3) older breeding animals year round,
- 4) production animals, so that they won't become extremely fat.



Score		Description of BCS categories
1 Very thin		General appearance of the animal is pinched and bony. Muscle mass has decreased. Ribs, shoulder and pelvic bones are easily felt and there is no palpable fat. Abdomen is tucked up when viewed from the side.
2 Thin		General appearance of the animal is slim. Ribs, shoulder and pelvic bones are easily felt under a thin fat layer. Abdomen is tucked up when viewed from the side.
3 Ideal		General appearance of the animal is balanced and normal. Ribs, shoulder and pelvic bones can be felt through a distinctive fat layer. Straight abdominal line.
4 Heavy		General appearance of the animal is fat. Ribs can be felt with difficulty; heavy fat cover in the shoulder and pelvic areas. Waist and abdominal area are distended because of fat pad.
5 Extremely fat		General appearance of the animal is extremely fat, massive and round. Massive fat deposits over ribs, shoulders and pelvic area. Noticeable abdominal distension. Fat deposits on face and limbs.