



Muskox: Arctic Adaptations

Muskox wear a massive coat, made up of long threads of extremely fine wool. The outer coat is overlain with long, coarse guard hairs. Except for their lips and nostrils, muskox are completely covered by this woolly blanket of hair. To avoid heat loss, extremities like the ears and the tail are buried in the coat. A tuft of hair projecting between the hooves covers and protects the muskox's feet. Muskox calves are born with a thick coat and lots of baby fat to keep them warm during their first spring days, when blizzards are still common.

Muskox are slow-moving animals, especially in the depth of winter. They conserve energy by being relatively inactive, moving little. Their slow and deliberate movements and long resting periods allow them to conserve energy. Muskox also co-operate in other ways to preserve energy, lying together to share body heat and breaking trails for each other in the snow.



Muskox are able to weather temperatures down to -40 C without increasing their metabolism. Metabolism is the rate at which the body burns energy. Adaptations like these allow muskox to survive at the limit of tundra, where snow blankets the landscape for 10 out of 12 months.

Muskox have excellent eyesight and acute hearing. They have an excellent sense of smell, and are able to locate food beneath the snow throughout the winter.

Photo by Ken Madsen

For more information, visit the Wildlife Management Advisory Council (North Slope) web site on muskox of the Yukon and Alaska North Slope at www.taiga.net/wmac/species/muskox.