

FEATHERS, FUR AND FAT

by Anne Landry, Waskesiu Lake, Saskatchewan



As fuel prices soar, we are becoming more aware, and more concerned with energy conservation, no more so than during the winter months. Watching a fox trot across a frozen dune in January quickly makes it apparent that we are not alone in being affected by the cold. For animals it is not just a matter of paying the fuel bills, but of life and death. All animals have special adaptations which help them conserve energy in winter and thereby help them to survive Canada's cold climes. Some birds and mammals avoid the rigours of winter by migrating south or hibernating, but many remain active. Animal signs give clues to the energy-saving adaptations of the Island: hardy winter residents.

A single line of dog-like tracks in deep snow; the sign of a fox. To save energy, a fox puts its hind foot in the hole made by its larger front foot, just as we tend to use the tracks made by the person in front of us, whether walking or skiing through deep snow.

A hare doesn't sink down, even in deep snow. Its large snowshoe feet are excellent energy savers.

Looking closely at a set of ruffed grouse tracks, we notice that they appear fuzzy around the edges. As these birds don't come equipped with snowshoes, small comb-like projections grow on their toes each fall which help the birds make headway in deep snow. (These crazy birds seem to prefer walking to flying.)

Open fields in winter become dotted with small holes in the snow. No tracks in or out, just the holes. These are ventilation shafts from tunnels dug by mice and voles which live underneath the snow most of the winter. It is a dark, silent world they inhabit, hidden from predators, where the snow keeps them warm. Air spaces in the snow enable the temperature at the ground's surface to remain fairly constant around -7°C while the air temperature may plunge to -30°C . (We employ the same principle with storm windows which have a layer of dead air between them.)

Watch birds closely on a cold day. Feathers provide excellent insulation and help retain more body-heat when fluffed up.

Most animals look healthiest in the fall and early winter, fat from summer's bounties. The fat insulates against the cold and is also a source of energy when food is scarce. No fall diets for them.

After a cold night, holes the size of small balloons appear in snowbanks, often accompanied by a pile of scats. A night's roost for a ruffed grouse, using the insulating power of snow to pass a cold winter's night.

The animals which make long gliding, or large circular tracks, borrow many of the above adaptations to help them survive winter. They wear down jackets and several layers of clothing which trap insulating air, wear skis or snowshoes to travel through deep snow, and camp out in snow huts or quinzees, just like a grouse in a snowbank.

Winter is undeniably our harshest season, but by using tips from the animals, we can all enjoy it.

