## The Annual Moult

Seals depend on a layer of fat beneath the skin (blubber) and on their fur for insulation against the cold of the water and winter air temperature. The fur is maintained by grooming. It keeps the animals warm, acts as waterproofing, and streamlines them when swimming.

The coat consists of densely packed, short, fine inner fur that traps body heat, and an outer layer of longer, coarse guard hairs, that keeps out water.

The fur gets damaged by seawater and parasites and becomes broken and worn out by abrasion on the sand and rocky surfaces where they haul out. It is renewed annually, and it is the loss of old fur and its replacement with new that defines the moult.

It begins 2-3 months after breeding and the process takes roughly 6 weeks to complete. During this time large numbers of seals haul out on the shoreline in close groups to conserve body heat. They rid themselves of dead hair by scratching and rubbing against the sand or rocks. The moult at Horsey usually starts in February, continuing until April as early and later moulting seals overlap.

It is thought that blood flow to the skin is increased to feed the growing fur leading to a reduced core temperature. The thinning of the coat as they moult, makes the animals more sensitive to the cold temperature of the sea, and the skin may become itchy as the new fur grows.

Whereas they are aggressively territorial when having pups and breeding, territory is not an issue during the moult and large groups of mixed males and females lie listlessly together near the tideline.

If they are uncomfortable at the approach of people or dogs, they will escape into the sea but doing this loses them the advantage of being out of the cold water and uses energy which they will have to replenish by feeding more regularly.

It might be that group confidence makes the seals more approachable when they are hauled out. The public are now aware of the spectacle of seals *en masse* during the moult, and some visitors take advantage to get closer than they should to attempt to touch them, take photos or even selfies. These are wild animals with sharp teeth, so this behaviour is dangerous for humans and unhelpful for the seals.

Wardening during the moult is at the convenience of wardens and mostly encouraged at school holiday times or in periods of milder weather when visitors are likely to be attracted in larger numbers. Most visitors are pleased to talk to seal wardens and interested to know why the seals are there in such large numbers. Wardens ask people to keep a safe distance from the animals and keep their dogs under control on a lead.