

MORE FEATHERED FIENDS

Around 195,000 pairs of emperor penguins live in 40 or more colonies on the Antarctic coast. The males remain on the Antarctic continent during the freezing winter, holding their eggs on their feet for 65 days before they hatch.



Emperor penguins *Aptenodytes forsteri* are the largest and heaviest of all the penguins, weighing about 30 kilograms and standing about a metre tall. Most penguin species feed close to the surface, but emperors can dive to incredible depths hunting for their food, which includes a mixture of squid, fish, and krill.

HUDDLING To cope with the freezing conditions of an Antarctic winter, male emperors huddle together in a tight pack. As many as 10 birds pack into every square metre of huddle. Outside a huddle it can be minus 35°C, but in the centre of a huddle the temperature is a cosy +38°C. As the penguins on the outside of the huddle get cold they slowly move from the outside to the inside of the huddle. Keeping the huddle together means life or death for the penguins and their eggs.



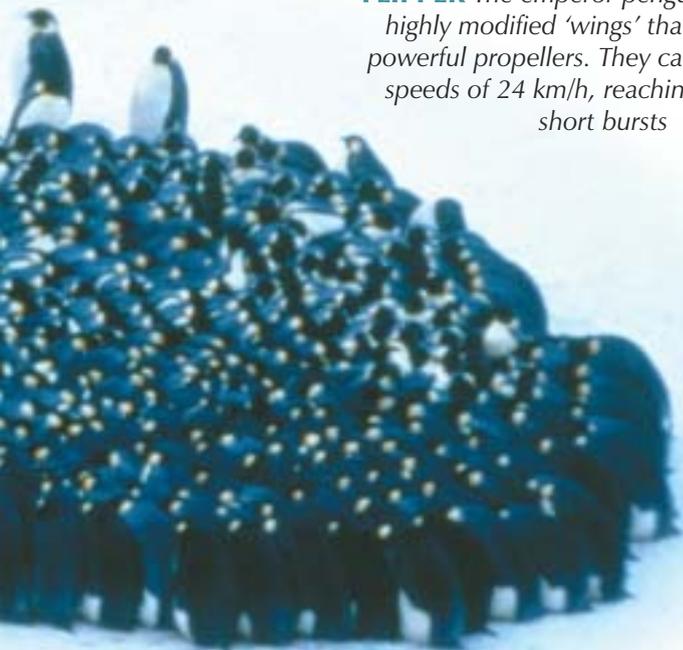
FAT LAYER A thick layer of fat under the skin provides a source of energy when food is scarce. Each year after the female has laid her egg she goes to sea to feed and the male stays on to incubate the egg. From their arrival at the colony, to the end of their incubation shift, the males must go without food for up to 150 days and have to depend upon their fat reserves for survival.

Emperor Penguins



DIVE DIVE DIVE! Emperors can hold their breath underwater for over 20 minutes, which enables them to dive to astonishing depths in their hunt for food. By attaching miniature computers or 'data-loggers' to the feathers on the backs of penguins, scientists have recorded regular dives to depths of more than 300 metres. The deepest dive known for any penguin is 458 metres.

FLIPPER The emperor penguin's flippers are highly modified 'wings' that function like powerful propellers. They can easily swim at speeds of 24 km/h, reaching 50 km/h for short bursts



WARM AND COSY The feathers overlap like tiles on a roof, creating and trapping a layer of warm air. Preening transfers oil from a gland near the tail to the feathers and assists with waterproofing.



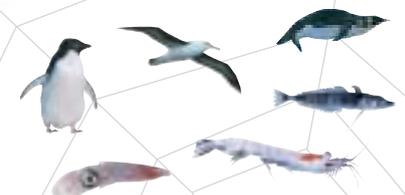
More Feathered Fiends MENU

Mixed krill
Fish soup
Sizzling squid

Males hold the eggs on their feet for 65 days before they hatch!



SIZING UP THE SUSPECTS



WHO'S EATING WHO?