



UNDERWATER FLIGHT

The cold southern oceans are filled with marvelous birds, called penguins, that are specially designed to “fly” through the water. Water is much denser than air, so God equipped them with paddles and powerful muscles that slice through the water with ease.

DEEP DIVES

Penguins are world-champion divers. In fact, emperor penguins can plunge to depths of 1,850 feet (564 m) and stay underwater for almost 21 minutes. Most penguins, however, feed near the surface and stay underwater only 2–8 minutes.

PORPOISING

Penguins are at their best underwater, but they still must come up for air. So they don't have to slow down, many penguins will leap out of the water like a porpoise. “Porpoising” also seems to confuse predators.

BUBBLE PROPULSION

Leopard seals sometimes lurk near the shore. So penguins make a quick leap out of the water, sometimes launching 6 feet (1.8 m) into the air. Just before launch, they release a cushion of bubbles that propels them forward—at two to three times their normal speed.

