



What's a Penguin?



It totters along, moving its body to the left and right as it walks. Perhaps it is its cuteness that makes the penguin so popular. The penguin has been used as a model for many cartoon characters, with Pingu which is made by Trickfilmstudio in Switzerland being particularly famous. Pingu is a Penguin who loves mischief and has unlimited curiosity. He makes an excellent pair with his friend Robbi the seal, since they are very similar, from their techniques for catching fish to even their body shapes. However, one cannot help but become suspicious when one watches the two of them swimming effortlessly in the ocean. Are penguins really birds? If they are really birds, why don't they fly?

The Bird that Abandoned the Sky

About 100 million years ago, the penguin's ancestors lived by flying from sea to sea. However, after about 30 million years passed, they gradually lost their ability to fly. Lost is really not the right word here; they stopped flying through the air and instead chose to fly through the water. As a result, their wings gradually came to resemble oars, and changed into their current flipper-like form.

We just mentioned that Pingu and Robbi had similarly shaped bodies. This is because the penguin body shape gradually changed to be more appropriate for flying through the water. Animals such as penguins, dolphins, whales, and seals minimize water resistance with their body shapes. The so-called streamlined body shape becomes

widest at a point about 1/3 of the way from the head. This has the property of reducing turbulence that can impede progress through the water. The slipperiness of the dolphin's skin has the effect of quieting turbulence in the water and creating a layer of smooth flow.

Can Humans Become Penguins?

People can get better at swimming if they study and learn from penguins. Women's competitive swimwear is actually based on applying such research. Such swimwear uses silicone rubber sheets around the chest and waist. This material has grooves cut into it, sort of like those on vinyl LP records. These grooves are designed to reduce the resistance of the water as much as possible. Additionally, applying a high-molecular-weight compound similar to that which creates the slip-

periness of dolphin's skin has also been considered. However, since these compounds could contaminate the water, this idea has been abandoned.

While swimming is one thing, there are other things we could learn from the penguin. L. E. Richdale, an authority on penguins, has discovered that penguins do not change their spouses. The bonds that tie husband and wife together are strong in penguins, and unless one dies or becomes missing, penguin pairs do not break up. Numerically speaking, a given pair will reunite at the next mating period with a probability of 83 percent.

How do humans compare? In Japan there are about 206,000 divorces per year, or one divorce every 2 minutes and 34 seconds. (According to a study by Japan's Ministry of Public Welfare in 1996.) It seems that we humans are still a long way from penguins.

