

**WATER GOES DOWN
THE PLUGHOLE THE OTHER
WAY IN AUSTRALIA**

No trip to the equator is complete without a real-life demonstration of this phenomenon with a water-filled bucket with a hole in the bottom. Tourists watch in wonder as their guide shows them the water swirling out of the bucket in one direction on one side of the equator and then swirling out the other way after they have stepped over the imaginary line. You may even have seen this demonstrated on television and, as people say, seeing is believing. Or is it?

The Earth is like a big ball that spins as if there is a spike passing from north to south through the centre of it. The top of this imaginary spike is called the North Pole, and the bottom of it is called the South Pole. At the equator (the imaginary line around the Earth's middle) the surface of the planet is believed to be moving at about 1,670 kilometres per hour. Further north or south from the equator the Earth's surface isn't moving as fast, and at the poles it is barely travelling at all – just gently turning.

According to scientists, this difference in the speed that the Earth's surface is moving has an effect called the 'Coriolis force'. At the equator, air moves at the same speed the Earth is turning. As this air moves north or south it is travelling faster than the ground underneath it and begins to slow down. As it does, it turns gradually to the right if travelling north, and gradually to the left if travelling south.

The Coriolis force works slowly and takes time to occur, but it is thought that it is this force that makes weather systems, such as storms, turn clockwise in the northern hemisphere, and anti-clockwise in the southern hemisphere. As a result,

