Feather Fascination! with local Birdwatcher, Jim Butler

Contact Jim at: beautifulbirds@y7mail.com

BIRDS EARS -WHERE ARE THEY?

Birds, along with us, are the most vocal of all the vertebrates. Bird calls are a rich feature of our everyday. With their complex and magnificent voices they are variously keeping in contact, warning others of danger, celebrating the dawn, attracting a mate and recognising their kin. But where are the birds' ears to receive this information?

Bird bodies are streamlined for flight. Protruding ears, like ours, would spoil the smooth flow of air over their bodies and produce drag. So the ears are simple openings located behind and below the bird's eye. These openings are not visible because they are covered by special feathers designed to perform important functions.

Flying implies that the air rushes past the bird's body. This could cause a lot of wind noise in the bird's ear (think of noise generated when blowing over the open top of a bottle). However, birds have evolved special feathers covering the ear opening so that an area of still air is created at the opening and the howl of the wind is deadened. These special feathers work just like the black foam covering outdoor microphones. The special feathers still allow the compression sound waves of bird calls to travel through the air into the ear. And in fact these special feathers have one more trick, they act to focus the sounds into the ear.

The end result is that although flying birds have potentially noisy winds flowing over their bodies - think of the peregrine falcon diving at 200km/hr! - they can still hear as well as or better than us standing below in awe. Happy Birding!

- *Jim* Image: Male Satin Bowerbird by Mike Ford ©