

Feather Fascination!

with local Birdwatcher,

Jim Butler

Eye of the Beholder

TO OUR eyes the male Australian King Parrot (42cm) displays the most vibrant colours: red, green and blue. But to the eyes of birds the colouring of the King Parrots differs from what we see! More on this below. King Parrots are endemic to Australia and are found along the



east coast from Cooktown in the north to Melbourne in the south. King-Parrots are found in rainforests, wet sclerophyll forests and increasingly in suburban parks; they are sedentary in Brisbane. They feed on nuts and seeds, fruits and berries, nectar and blossoms, insects and their larvae. Their flight in the open is very distinctive with deep, rhythmic wing beats; when flying through the treetops, they often swerve abruptly, tilting their bodies and fanning their wide tails. They need a deep tree-trunk hollow to breed and can live up to 25 years.

We are active by day and we use bright colours as cues; most birds are active by day and colourful and it was assumed they would see as we do. Only in the 1970's was it found that many birds see into the ultraviolet wavelengths. Although we see King-Parrots as distinctly red and green, when viewed under ultraviolet light, some wing feathers glow a strong yellow colour.

Our retinas have three types of cone cells: red, green and blue. By contrast, diurnal birds have four types: red, green, blue and one sensitive to UV wavelengths. There's another difference: in birds, each cone cell contains a tiny drop of coloured oil that ours lack. The oil drop functions like an optical filter. Therefore, they are much better at detecting differences between two similar colours. Additionally, the eyes of most birds are more sensitive to UV light than they are to visible light. Scientists also have learned that many birds have plumage that reflects UV light.

Hail the colour relativism of the King Parrot plumage!

~ Jim

Contact Jim: beautifulbirds@y7mail.com
Digital Bird Guide: <http://www.moggillcreek.org/>

Image: Australian King Parrot as seen in visible light only, by Ed Frazer at Brookfield