A Sight to Behold

Jiri Lochman

Depending on your viewpoint, pelicans are either awkward and clumsy birds, or graceful and fascinating creatures; a pelican in flight is a sight to behold.

The Australian Pelican (*Pelecanus conspicillatus*) is one of seven species in the world. With its bold black and white markings, blue legs, pink pouch and yellow eye-rings, it is arguably the most beautiful.

Found throughout mainland Australia and Tasmania, small numbers also occur in Indonesia, New Guinea and the western Pacific islands.

Pelicans are colonial nesters. Colony sizes in the nine regular breeding sites in Western Australia vary from a dozen pairs to over a thousand.

Nests are little more than shallow scrapes on the ground, often lined with bits of seaweed and discarded feathers. Milk cartons and sandals have also been found in their nests.

Cliff Winfield

Housekeeping just isn't a pelican priority; these eggs sit exposed on an untidy nest (above).

Strange ballet dancers indeed! These birds, scattered across the tidal flats of Princess Royal Harbour in Albany, seem to be limbering up for a performance (above right).

Two eggs are usually laid. Within a couple of weeks of hatching, the chicks gather in small mobs or "creches". Childcare is not a problem! The adults leave the nesting site for up to days at a time to search for food, leaving the young to fend for themselves. Fortunately, pelicans almost invariably nest on islands, safe from terrestrial predators.

Northern colonies nest between February and September, usually June-August. Birds of southern colonies may nest in both spring and autumn.

The pelican's clownish-looking bill is actually a multi-purpose tool. It is used mainly as a "scoopnet" for catching small fish and shrimp, rarely for carrying them.

When large flocks of seabirds gather in a feeding frenzy, swooping terns may suddenly find themselves seated in the pouch of an over-enthusiastic pelican. 'Four-winged pelicans,' with one wing protruding from either side of their bills, make a rather bizarre sight; much like high-tech aeroplanes with "trim-wings" at the front!

When pelicans do carry food to their young, it is normally stored in their stomach, and regurgitated partially-digested at the nest site.

A pelican's pouch is also used for catching rain. Birds sitting on nests during heavy rain showers have been seen with bill open and pouch distended, facing head to wind. In a heavy storm it may collect more than 250 ml in 15 minutes. The total pouch capacity is seven litres!

If that is not enough, the pouch is also used as an evaporative cooler and radiator. On hot days pelicans can be seen mouth agape, fluttering the floor of their pouch. This is richly supplied with blood vessels, bringing body heat to the surface where it is lost through evaporation and radiation.

Cliff Winfield

The Australian pelican in flight; a sight of grace and beauty (above).

Fish fever: mouths agape and pouches at the ready, pelicans at the Perth Zoo jockey for position during feeding time (right).

Cliff Winfield

It doesn't stop there! Brightly coloured pouches are a sexual turn-on in the pelican world and bright pink pouches with purple stripes are a sure sign that breeding is underway.

Pelicans are superb aviators. They can often be seen on a hot day hitching a ride on spiralling thermal updrafts.

The birds spread out from their colonies with slow and heavy wingbeats, searching out suitable updrafts. When one is found, the lead birds begin to circle, flapping their wings intermittently, rising steadily through the sky. Within minutes a "staircase" is formed, with ten, twenty, perhaps a hundred pelicans spiralling steadily upwards. Up they go, thousands of feet high, until the first begin to peel off, gliding towards some distant feeding ground. Wings motionless, slightly tucked in, losing altitude but picking up speed, they race towards the distant horizon.

On short journeys one updraft may be enough. Over longer distances several are needed: each is sought out like the first, birds spreading out in search of new thermals while gliding down towards earth.

TEXT - Jim Lane

Cliff Winfield

Shadow play on water: a moment of tranquility for this pelican, mirrored in bizarre silhouette at Wilson Inlet near the town of Denmark (above).

Young pelicans in a 'creche' in Green Island, near Albany, waiting for their parents to return (below).

Jiri Lochman

Cliff Winfield

LANDSCOPE

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EDITORIAL

It is difficult to remember a time when our daily news did not feature some environmental controversy. To people involved in environmental research and management, the popularity of 'the environment' is a mixed blessing.

Greater public consciousness of environmental issues has meant increased funding and, to some extent, greater prestige. But many scientists working on ecosystems are uncomfortable when their work is placed in the political spotlight.

The knowledge that a scientific observation that once would have been tucked away in a scientific journal to be read only by a few colleagues could become the centre-point of a political controversy is daunting.

Retaining objectivity in any research area is difficult. For those engaged in research on the natural environment it is even more difficult. Unlike the physical sciences in the natural sciences the truth is often camouflaged by interactions between factors which vary over time and space. When the results of this type of research are placed in the political arena, the mixture is often volatile and the truth a casualty.

To enable scientists to better seek the truth and communicate it, the scientific community has adopted what has been called "the scientific method". The scientific method is a code of conduct with rigid requirements. An offshoot of that code is a set of rules which scientists must follow, at least in reputable scientific journals, if they are to have their research published. Unfortunately, a byproduct of this is that scientific articles are not the easiest to read and are often plain boring.

Given that the environment has become a major political issue, it is important that those involved in the debate are fully informed. But scientists are faced with a dilemma. They need to popularise their work to reach a wider audience. On the other hand, they cannot afford to lose objectivity.

NATIVE CREATIONS

Nouvelle jardins, multiculturalism or laissez-faire; which garden fashion will you choose? Turn to ***page 22.***

WILD MARRON

Do our wild marron have a future or will local gourmets keep catching them to the point of extinction? Find out on ***page 4.***

KARRI MAGIC

What is really going on in the karri forest? On ***page 32*** *we take a look at the system of conservation reserves that have been established to preserve this awe-inspiring forest.*

STRANDED!

Relive the euphoria of the Augusta whale rescue on ***page 18.***

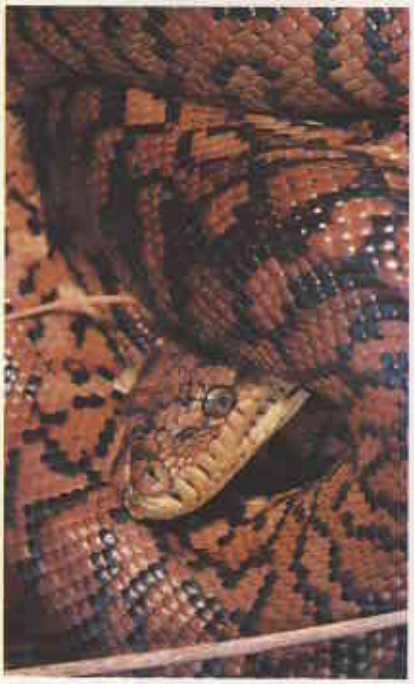
BACK TO BASICS

With today's massive land boom it's hard to imagine that the State once couldn't give land away fast enough. Now the government is buying back our valuable conservation areas. See ***page 43.***

DESERT GEM

The Gibson Desert Nature Reserve covers over 1.8 million hectares. It is a desolate but subtly beautiful landscape. Read about this unique area and the management problems it presents on ***page 48.***

SNAKES & ADDERS



Slim and active snakes have emerged hungry from their winter hibernation. But they're not all venomous. See ***page 51*** *for tips on living with snakes.*

AFTER THE FOX

Foxes pose a major threat to native mammals and other fauna. Can we outfox them? See ***page 12.***

A SIGHT TO BEHOLD

'Its pouch can hold more than its belly can', goes the popular rhyme. Find out more about this awkward but graceful bird on ***page 39.***

Cover Photograph

One of our natural wonders - the beaches of Hamelin Pool (Shark Bay) consist of billions of small shells.

Photo by Bill Bachman.

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