



ROSELLAS; AN AUSTRALIAN VIEWPOINT

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Adelaide Rosella

Platycercus elegans adalaidae
Gould 1840

Introduction

For many years there has been conjecture whether the Adelaide Rosella is a true species or a subspecies of the Crimson Rosella *Platycercus elegans elegans*. The latter follows the usual taxonomic nomenclature and for the purpose of this article I, too, will treat the Adelaide Rosella as a subspecies with different forms (i.e. races). While saying this, there are minor character differences between the Crimson Rosella and the Adelaide Rosella. Crimson Rosellas are more tolerant to humans in the wild, they readily accept feeding stations in parks and gardens and will put their trust in "the hand that feeds them."

Adelaide Rosellas are more distant to humans. They tend to be forever alert and could not be classed as tolerant of humans. Crimson Rosellas tend to spend more time on the ground during the winter months foraging for food, compared with Adelaide Rosellas which spend more daylight hours in the canopy of shrubs and trees. This could purely be a feeding pattern as the vegetation is so variable over the distribution of both groups of birds.

For readers who are interested in the different subspecies, I have given a descriptive word picture of their plumage, coloration, distribution and habitat. This is followed by the housing and captive breeding sections.

Subspecies

Platycercus elegans fleurieuensis

Ashby 1917

Generally referred to as Adelaide Rosella or rosies.

Description:

Adult Male. The adult male is approximately 13.5 inches in length.

The feathers of the mantle and back are black, edged with orange-red, being more orange-red than black. The underparts are bright red with the upperparts paler than the Crimson Rosella *P. elegans elegans*.

Adult Female. The adult female is similar to the male but the head is smaller and the upper mandible is narrower and smaller.



Distribution of Adelaide Rosella, *fleurieuensis*, *adalaidae*, *subadalaidae*

rower and smaller.

Immatures. Immatures are similar to *P. elegans adalaidae* and are described under "immatures" of that species.

Distribution

P. e. fleurieuensis occupies an area embracing Cape Jervis to Victor Harbor and Goolwa to Happy Valley Reservoir south of Adelaide. Opinions differ on this northerly boundary but as there is a great variation in color with this and its allied subspecies, a distinct limit of the distribution is difficult to define. I have, therefore, included the area where numbers of these brightly colored birds are found, even if others of less brilliance do inhabit the same area.

Habitat

The area inhabited by *fleurieuensis*

is referred to as the Lower Mount Lofty Range and includes some beautiful country of rolling hills and valleys with permanent creeks and small rivers, with an annual rainfall of approximately 24 inches. Much of this area which has a wide range of trees and shrubs is used for dairy farming and mixed farming but, probably because of its somewhat hilly terrain, many trees have been left providing an ideal habitat for the subspecies which, if not increasing numerically, are at least holding their own. Many towns exist within their range and suburban Adelaide is fast spreading into the southern areas but, because people like to grow fruit and almonds, it is unlikely that their presence will have any great effect on the avian population. In latter years people have begun to study the bird's environment and are inclined, where possible, to leave as many large trees as is practicable,

Platycercus elegans adalaidae

Gould 1840

Also known as Adelaide Rosella.

Description

Adult Male. The adult male of this subspecies is approximately 14 inches in length. The forehead and crown is red, nape and side of the neck orange-yellow marked with red, cheek patches violet-blue; hindneck, mantle, scapulars and back black, with each feather margined with varying shades of color from olive-yellow, red, dull brick-red to yellowish green. Underparts vary from scarlet to orange-yellow, rump and upper tail-coverts olive-yellow marked with red; primaries black with dark blue on the outer webs; median upper wing-coverts black, bend of wing and secondaries pale blue. The central tail feathers are dark olive, washed with green with the remainder being pale blue tipped with white; bill is a greyish-horn color, iris dark brown and legs grayish.

Adult Female. The adult female is similar to the male with the body color being just as variable. The head is smaller and upper mandible narrower.

Immatures. The nape, mantle and back are greenish-olive and the rump is olive-green; cheek patches violet-blue, red frontal band extending onto crown, breast and abdomen greenish-

buff with varying amounts of orange-red feathers; the primaries are black with upper outer webs blue, secondaries black with outer webs greenish-blue, the underwing-stripe is evident; the bend of the wing violet-blue shading to pale blue; under tail-coverts are olive-green with orange-red bands near the base of each feather; tail is greenish-blue.

Young birds assume full adult plumage with their first complete molt when they are about 12-13 months old.

Distribution

This subspecies is not an isolated group, it is more likely a clinal variation with a continuous gradual change from red to yellow with the birds usually referred to as Adelaide Rosellas being, what can be imagined to be, in the center of an intermediate range between those two color races; the redder forms being in the wetter southerly areas and the more yellowish forms in the arid northerly limits of the range.

The transition from one primary

color to another produces many variable forms, several of which may occur in one flock. This is a feature of the Adelaide subspecies extending to and beyond Clare in South Australia, which also appears to prefer higher terrain with large trees, however, the altitude of the hills seldom exceeds 1950 feet above sea level. Some birds of this race follow the large eucalypt gum trees which skirt the Murray River to the River Murray upstream from Mannum. A similar occurrence also takes place along Burra Creek further north. This tree-lined partially perennial creek runs from the vicinity of the copper town of Burra through some fairly arid country entering the River Murray slightly upstream from the town of Mannum. In these areas some mingling of the subspecies Adelaide and *flaveolus* (Yellow Rosella) occurs and a number of birds showing signs of transitional coloration can be noted.

In an area adjacent to the Marne River there is evidence of the hybridization of *adelaideae* and the Mallee Ringneck Parrot *Barnardius z. barnardi*.

Habitat

The Adelaide Rosella inhabits the area north, south, east, and west of the City of Adelaide which includes part of the Mount Lofty Ranges, including Mount Lofty itself. This range is also at times referred to as the Adelaide Hills. The distribution of this subspecies includes many of the southern and eastern suburbs where they are quite plentiful. The fruit-growing areas through the ranges, the Barossa Valley (one of Australia's best known wine producing areas), and northwards to about Clare where fruit and grapes are also grown.

Although the birds do considerable damage to orchards (like other members of the genus) they show little respect for the efforts of fruit growers to keep them from the ripe or semi-ripe fruit. In actual fact they rely greatly upon the seeds of grasses for their subsistence including the introduced Dandelion *Taraxacum officinale* and Capeweed *Arctotheca calendula*, from which they often extract the seeds from the wool-like covering when they are in season. The seed of Milk Thistle *Sonchus oleraceus* is also eaten when

available, as is the seed of the Wild Artichoke *Cynara cardunculus*. The seeds of Rye Grass and Clover, plus other pasture grasses, are also taken and standing crops of oats and, to a lesser degree, wheat at times are eaten. In this case the rosellas do not create a great deal of damage and few farmers, if any, complain about the grain taken.

They feed on the berries of Hawthorn and other members of the *crataegus* genus, but it does appear that they are actually devouring seeds rather than the flesh surrounding them.

Adelaide Rosellas are often seen on the outer fringes and along firebreaks in the many *Pinus radiata* plantations throughout their distribution. The birds are seldom found very far into the pine forest, but in places are quite numerous on the outer perimeters.

Several specimens of a lutino mutation of this subspecies have been found in the wild, the general body color being yellow, the normal blue areas showing white with the red remaining as in the normal birds.

Before the protection laws were passed for this subspecies, some were taken and attempts were made to breed from them and, although some progress was made, the results were very disappointing. It is important to state that, in the case of the yellow birds taken, each one that was removed (from the wild) had just left the nest and would soon have succumbed had it not been found. Unfortunately their eyesight was extremely poor, and instead of having to be captured, each one was just picked up out of the grass. Several cinnamon Adelaide Rosellas have been taken into captivity under permit during the past few years but captive breeding has been slow.

Platycercus elegans subadelaideae

Mathews 1912

Although known as the Adelaide Rosella, this subspecies is usually referred to as the Flinders Range population or race.

Description

Adult Male. Adult males, especially those of the more northerly region, differ from *P. e. adelaideae* as they are usually paler. The hindneck, mantle,



Photo by Barry Hutchings

Adelaide Rosella nesting hollow in eucalypt gum tree, Barossa Goldfields, South Australia. This long established nest, which is used each season, is approximately seven feet above the ground level.

scapulars, and back are black, each feather edged with pale buff that is slightly yellowish; breast yellow, tinged with orange extending to the under tail-coverts. The red frontal band merges into the crown.

Adult Female. Differs from the male, but only slightly, breast coloration is usually more orange, although it can vary; the head is smaller and upper mandible narrower.

Immatures. Immatures of the *subadelaidae* race have a red frontal band that extends onto the crown; nape, mantle and back pale yellowish-olive, rump a paler tint of olive. Cheek patches violet-blue; underparts greenish-buff with orange-red feathers, the latter varying between individuals. The immature birds of the southern area within the distribution of this subspecies do not differ greatly from immatures of the subspecies *adelaidae*.

Distribution

This subspecies continues northwards from the northern-most ill-defined limits of the range of the preceding race, continuing into the Flinders Ranges and areas of close proximity. The transition from one race to another is not abrupt, but rather a gradual mergence of one form into another similar to the mergence of *fleurieuensis* to *adelaidae*, with birds showing a predominance of yellow in the more northerly limits of their range. In this area the degree of color variation from one individual to another is less prominent than it is in the lower parts of their distribution. It is considered that *subadelaidae* occupies an area northwards from about Clare to at least midway into the Flinders Ranges. I have observed them to be quite plentiful in the Quom-Hawker area, which includes Warren and Buckaringa Gorges and parts of Partacoona Station, northwards in Wilpena Pound, from where they (apparently) become rarer. Personal observations for a continuous period of approximately two years failed to record them in the Arkaroola area of the northern Flinders Ranges. They are much more numerous in the southern areas of their distribution (around Gladstone, Laura, and Wilmington), but these birds are varying degrees of a color range that exhib-

it the transition from the subspecies *adelaidae*.

Habitat

Most of the Flinders Ranges (which has become an extensive and popular tourist attraction) are in a low rainfall area but the rugged terrain, spectacular bluff and rocky gorges, create and provide permanent and semi-permanent waterholes. In supplying water for their stock, ranchers assist the needs of the birds, therefore water is not usually a problem within the subspecies' range. As with all the other rosellas, the seeds of grasses and weeds form the greater part of their diet, however, the seed of other plants are also eaten. In times of drought this race would have to rely on other seeds to a greater degree than the races which occupy areas that have a better and more reliable rainfall. The most predominant tree in the area is the River Red Gum *Eucalyptus cameldulensis* (which is similar to those referred to for the other subspecies). It is a food source of seed-bearing nut-like fruits. Large areas of Native Pine *Callitris columellaris* are also present and they, too, can provide additional seed as does the Mulga *Acacia aneura* and Beefwood *Grevillea striata*. Other shrubs which supply seed include Hophush *Dodonaea* spp., Tobacco Bush *Nicotiana glauca*, Emu Bush *Eremophila longifolia*, Bullock Bush *Heterodendrum oleifolium*, Camel Bush and Dead Finish — plus all species of acacias. Smaller plants that supply varying amounts of seed for the subspecies survival are Wild Melon *Citrullus vulgaris*, Spinifex *triodia* spp., Salvation Jane *Echium lycopsis* (also known as Paterson's Curse) and, after floods, Wild Dock and native Holly Hock *Lavatera plebeja*. The many mistletoes which grow on native trees also provide food in the form of berries and seed.

Housing

When constructing an aviary for rosellas it must be remembered most of them can chew through netting if it is not a suitable gauge. I suggest 16 standard wire gauge, galvanized 1 inch square. A suitable flight area of 12 feet long x 4 feet wide x 8 feet high, in addition a shelter area 4 feet deep x 4 feet wide x 8 feet high. Materials can

consist of square or round galvanized steel with the sides and roof of heavy fibro-sheeting or galvanized steel sheets.

I realize many aviculturists prefer to house their birds in suspended aviaries and I'm sure there are plenty of them in the USA from which a design can be copied if this is the preferred form of housing. With either construction I favor a rear covered-in corridor with entrance at the rear of the aviaries. This design minimizes disturbance to the birds and, from my observations, seems to be less stressful for the birds. The covered area can be used as a food preparation site.

Captive Breeding

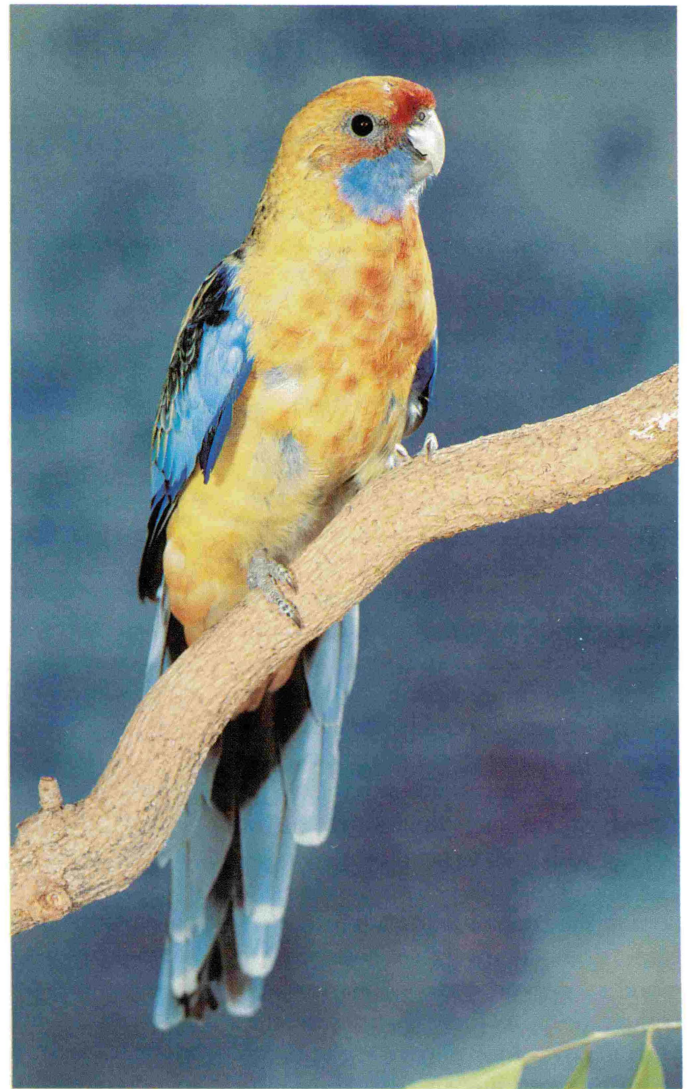
In South Australia, breeding of the Adelaide Rosella can occur from August to January. Of the hundreds of nests (of this species) that I have studied in the wild rarely was one located less than seven feet above ground level. They were always in a living or dead tree, although suburban councils have, of recent times, allowed nestboxes to be placed high up in suitable trees within their area because of the decline of old trees with natural hollows.

Either a hollow log or wooden nestbox is suitable for the Adelaide Rosella. If the aviary is large enough one of each type would give the birds a choice. Nestboxes can be 20 inches and 5 inches square (inside measurements). I recommend the placement of hardwood slats on the inside of the front for easy access to and from the nesting chamber. I prefer the top to be hinged, or a sliding door on the side of the box, for use as an inspection door. A suitable hole, slightly larger than the body of the male, should be made with a small platform or perch placed three inches below the entrance. I suggest that nesting logs be 24-30 inches deep, with an inside diameter of eight inches, and hung vertically with the top left open thus allowing full access into the top of the hollow or, if preferred, a similar entrance hole and lid as recommended for a nestbox can be used.

Over the years I have tried various combinations of nesting materials for many species of parrots and have now reverted to using only untreated natural wood shavings. This medium is 2.5



The Adelaide Rosella, a back view. This species can be quite variable in color and pattern.



The same bird from the front.

inches deep, well packed down, and once the birds commence nesting the nesting chamber needs to be checked in case further material is required.

If they commence breeding in the first half of their breeding season, double brooding usually occurs, and a plentiful variety of food — even twice daily (morning and afternoon) can entice them to a second brood.

This type of feeding is not just for rosellas but can be used to great advantage with other parrot species.

The clutch of eggs varies from four to five, sometimes six, but rarely more than six are laid. Incubation varies from 19-21 days and the young can remain in the nest for up to 35 days before they fledge. If the parents commence a second brood it's advisable to watch for any aggression by the male towards the youngsters who are usual-

ly independent at this stage.

From the time of fledging Adelaide Rosellas commence a slow molt, attaining adult plumage by 14 months, with the back being the last area to be completed. It is not uncommon for either sex to breed when they are only 12 months old but breeding is more natural in their second year.

Feeding

Rosellas usually feed on a wide variety of foods in the wild, i.e., insects, fruit, blossom, seeding grasses — ripe and green, nuts, shoots of shrubs, buds of apples, pears, almonds and walnuts, heads of cereal crops and a wide range of plant fruits and seeds.

In captivity the choice is limited but a standard dry seed mix of canary, white millet, Japanese millet, panicum, sunflower, and a small amount of

hulled oats and cracked maize.

Foods that can be varied daily include grass stems and seeding grass heads, silverbeet, apple, sliced carrot, grapes, and corn on the cob.

In addition I recommend the regular use of soaked seed particularly during the breeding season. Mineral grit and cuttlebone also contribute to their well-being. Fresh clean water should be available daily as rosellas enjoy bathing.

Bibliography

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