The Splendid Fairywren

Malurus splendens

by Mark Cairns & lan Smith, Royal Melbourne Zoological Gardens, Melbourne, Victoria

Preamble

The keeping of softbills in aviculture, in particular fairywrens, is becoming more popular as people realize that they are not a bird species reserved only for the most experienced aviculturists to house and breed. More importantly, it is a realization that the keeping of softbills is the simple application of different management techniques, feeding requirements, and level of commitment from that of the more "traditional" bird species such as parrots and doves.

Many of us at one time or another have probably seen a species of fairywren in the wild darting about whilst twittering loudly. As aviculturists many of us have probably thought to ourselves how sturning these birds would look in the backyard aviary. One species that could be considered as a candidate for such an undertaking is the Splendid Fairywren which is a fascinating and stunning bird in a well planted aviary.

Other Common Names

Black-backed Fairywren, Turquoise Fairywren, Australian Banded Wren, Banded Blue Wren, Banded Fairywren, Mormon Wren, White's Blue Wren.

Introduction

The word "wren" comes from the European species of bird with the same name, whereas in Australia it has been used to describe a number of small active bird species that dart around on the ground and in thick foliage and scrub layers. The fairywrens belong to the Family Malundae which is classified to form part of the largest, and arguably the most successful, group of birds collectively known as passerines (commonly called perching birds or songbirds). The name "songbird" is given to passerines because they have a syrinx (similar to the larynx in humans). This is believed to have provided passerines with an evolutionary advantage because the energy used to produce complex vocalizations to partition, hold, and defend living space, is less than the energy used in physical exertion to perform confrontational behaviors (which run the risk of injury) employed by other groups of birds. The Maluridae is made up of five genera. Two of these are endemic to New Guinea (Sipodotus and Clytomyias),



The splendid Fairywren Malurus splendens.

Cedar Hill Bird Enterprises

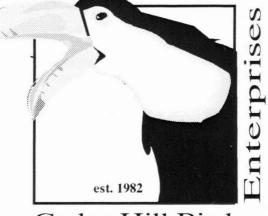
Breeding for the new millennium.

We breed over 70 species of exotic parrots and softbills. We specialize in rare color mutations from around the world and continue the propagation of the rarest birds in captivity. Our current breeding program includes Hoffman's Conures (both species), Yellow Faced Parrotlets, White Eared Conures (nominate and sub species), Yellow Lored Amazons, Golden Conures, and Cuban Amazons. Our mutations include Lutino & Goldchecken Kakarikis, Lutino and

Rubino Rosellas, Blue-Lutino-Albino Pacific Parrotlets, many mutation Grass Parakeets and much more. Check out our Web Page.

> We are always looking for Rare & Unusual Color Mutations

Eric Antheunisse Lodi, California Phone (707)578-3976



Cedar Hill Bird

www.Cedar-Hill-Birds.com Cederhil@aol.com

UPCOMING CALIFORNIA BIRD SHOWS

JULY 18 AUG. 29 SEPT. 12 SEPT. 19 SEPT. 26 OCT. 3

OCT. 10

DEC. 11 & 12

SAN FRANCISCO VALLEJO SANTA ROSA ANTIOCH SAN MATEO TULARE PLEASANTON SAN FRANCISCO COW PALACE

SOLANO COUNTY FRGRNDS SONOMA COUNTY FRGRNDS CONTRA COSTA CNTY. FRGDS. SAN MATEO EXPO CENTER TULARE COUNTY FRGRNDS. ALAMEDA CNTY. FRGRNDS COW PALACE

FOR INFO CALL (707)578 3976 WWW.CEDAR-HILL-BIRDS.COM CEDERHIL@AOL.COM CHECK OUT OUR WEB PAGE FOR OTHER SHOWS IN CALIFORNIA two are endemic to Australia (being Amytornis - grasswrens, and Stipiturus - emu-wrens), and one is shared by Australia and New Guinea (Malurus -Fairywrens).

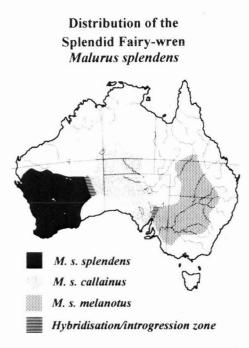
The Splendid Fairywren *Malurus* splendens was described in 1830 and belongs to a group commonly called "bi-colored wrens." The term "bi-colored" refers to the change in plumage colour by mature males. During the breeding season males attain a "nuptial" plumage which is brightly colored, and in the non-breeding season molt to a dull "eclipse" plumage. The male is brightly colored throughout the breeding season so he can display to a prospective mate and to assert himself as the dominant male to the rest of the social group.

The forming of social groups/family parties with siblings is a common behavioral characteristic of the fairywrens. It is also interesting to note that the erect tails typically seen in Fairywrens is thought to play a part in maintaining stability within the social group by acting as a signalling device. Often the dominant animals will have slightly longer tail feathers. With the loss of this display/signalling system (made up by the combination of plumage colour and erect tail) during the molt, it is not uncommon for all members of a social group to molt simultaneously. After the breeding season is over the males molt into a dull brown plumage (similar to female), with the tail and wings being washed with blue.

The male can be distinguished by having a black bill and dusky grey coloration around the eye. This dull plumage allows him to retire safely back to a normal mode of existence where he is able to camouflage himself with his surroundings. It has been known for elderly males to molt directly into a new nuptial plumage, bypassing the eclipse plumage phase altogether. Females remain unchanged in plumage throughout the year and are generally brown with (unlike the female Fairywren Malurus cyaneus), a slight blue wash through their tail and wing feathers. Females have a russet brown coloration around the eye and have a light brown bill. Juvenile males and females are difficult to sex and adopt the plumage coloration of the adult female but lack blue in the tail.

Distribution

The Splendid Fairywren is a widespread species occurring throughout central eastern, central, and far Western Australia. Throughout this range they have been described as replacing the closely related Superb Fairywren *M. cyaneus* which occurs through eastern and south eastern Australia. It is generally absent from the northern tropical regions and



extends just north of the Tropic of Capricorn in central east and central Australia. This species appears to be more adapted to semi-arid and/or arid environments. Three distinct races of *M. splendens* are currently recognized where distinction between races is based on differences in adult male nuptial plumages:

Splendid Fairywren *M. s. splendens.* This was the first of the subspecies to be described by ornithologists and is therefore considered to be the nominate race. The male has a uniform deep violet blue base colour on the crown, back, throat, chest and underbelly and is on average slightly larger than the other races. This subspecies tends to favor forest margins and dry inland habitats in dense foliage in Western Australia. Its feeding behavior is atypical of many other fairywren species as it is often found searching amongst higher levels of tree foliage and shrubs.

Turquoise Fairywren M. s. callainus. This race is found through the central Australian part of the distribution where it generally tends to occupy a greater proportion of arid habitats types when compared to those of M. s splendens. This race differs by having a distinct bright turquoise blue on the crown and back, black rump, sky blue underbelly, and sometimes black scapular feathers. The throat retains the deep violet blue coloration of Ms. splendens. Here its habitat is typified by dense mulga, mallee and salt bush scrub ranging from South Australia through to the central Northern Territory. This subspecies hybridizes/introgresses with M. s. splendens in a broad zone north of the Nullarbor Plain.

Black-backed Fairywren M. s. melanotus. This subspecies is in most respects similar to M. s. callainus but differs by having a uniform bright cobalt blue base colour with a distinctly narrower black breast band. This race is found in mallee and porcupine grass habitats from northern Victoria through to south/central Queensland Although they will freely interbreed, very few field records report of any introgression between this race and M. s callainus. This is likely to be caused by the Evrean barrier (a natural "wall") which follows the site of the inland sea bordered in the east by the Flinders Ranges in South Australia.

The delightful colour photo by Warwick Remington accompanying this article depicts an adult male in "nuptial" plumage. Although the definitive provenance of this particular animal is unknown, it possesses the characters that are typical for the subspecies melanotus of the Splendid Fairywren. All three races are essentially the same size around 14cm in length (5.60 inches). Female variation between the races is negligible although plumage coloration tends to pale in more arid regions which, like many other bird species, is in concordance with Gloger's Rule.

The Splendid Fairywren is relatively new to aviculture. This may have to some extent contributed to the misconception that Fairywrens (and softbills in general) are difficult to house and breed. In Victoria at the end of March 1996 there were only 33 licensed specimens in captivity (no demarcation of subspecies). At the end of 1997 the number of individuals in zoological institutions was also very low with a total of four *M. s. melanotus* (black-backed Fairywren) at Taronga Zoo and 13 (no subspecies given) at Perth Zoo.

It would appear that it will be some time before this species will be at sufficient numbers to be readily available to the general aviculturist. It is also unfortunate that because of their rarity in captivity the price tag is somewhat expensive which may deter many aviculturists from keeping them. The price of birds equates constantly with availability These birds cannot be recommended for beginners and should only be undertaken by reasonably experienced aviculturists. The captive husbandry of this species is uncomplicated, and is basically very similar to that of the Superb Fairywren.

Aviary Design

Fairywrens in general have rounded wings which make them well adapted for maneuvering amongst thick shrubs and foliage in search of insects. The disadvantage of this is that they are not particularly strong flyers over large spaces and long distances. Unlike the Superb Fairywren, the Splendid Fairywren is much shyer and is very reluctant to leave the safe haven of dense cover and fly into open spaces. An adequately sized aviary for this species could measure 4m x 3m x 2m [approx. 13 x 10 x 6 feet]. The dimensions of this is not designed to provide a length of flight as you would for a parrot species but, more importantly, to provide enough room to plant out the enclosure with a large variety of low growing shrubs and bushes that simulate their natural habitat. This dense shrub layer and foliage will provide a habitat that will ensure the psychological well being of the birds and provide a source of environmental enrichment in that it will stimulate behaviors of natural hunting and searching for insects.

There are a number of plant species that can be recommended and readily available at nurseries that provide the variety and "ecotone" suitable for the Splendid Fairywren. Tussock grasses such as Poa labillidieri that mimic porcupine grass; mat-rushes, Lomandra sp.; Grevillea sp.; heath banksia Banksia encifolia; shrub teatrees, Leptospermum sp.; bottlebrushes and heath-myrtles, Callistemon and Melaleuca sp.; needlewoods, Hakea sp.; Phyllodinous leafed wattles, Acacia sp.; common correa Correa reflexa; slender hop-bush Dodonea viscosa, heaths and beard-heaths, Monotoca, Epacris, and Leucopogon sp. (although these can be difficult to grow and maintain); daisy-bushes, Olearia sp.; emubushes, Eremophila sp.; and saltbushes and bluebushes, Atriplex and Maireana species. This is only a short list of suitable plants and many other plant species could be used.

The plant species provided here have been chosen on the basis of their relatively rigid bush or shrub-like habit that essentially provide both shelter and a solid framework for the birds to construct a nest in. They have also been chosen for the quantity of flowers that can be produced which will attract a larger number of insects. The greater variety of flowering plants that is provided will attract a greater number and variety of insects. Exotic plants can be used but they may not attract the same number of insects to the aviary as would native plant species.

Within the aviary there should be a covered in section (a minimum of a quarter of the aviary) where branches of brush and trees such as *Melaleuca* species can be placed. Here the birds can seek out shelter from inclement weather and utilize cover that provides a sense of security for roosting and nesting.

Construction of an aviary need not be "robust" but, more importantly, "air tight" as fairywrens are excellent escape artists. Both nylon netting and small gauge weldmesh wire can be used. The disadvantage of netting (although cheaper and desirable if the aviary also houses quail species) is that it is easily damaged by falling branches and sticks and requires regular checks for developing holes and repairs. The aviary should also be rat and mouse-proofed as fairywrens are particularly vulnerable to these pests because the birds nest and roost closer to the ground than most other bird species.

Stocking the Aviary

Only one pair of fairywrens should be housed in an aviary as breeding pairs are territorial and will not tolerate the company of any other conspecifics other than their own offspring. Unlike the Superb Fairywren, the Splendid Fairywren parents are known to tolerate both the male and female young in the family social group.

Although the young can be left in the aviary for successive broods, they should be removed from smaller sized aviaries. An aviary can become to congested (particularly if it houses a mixed collection) and the parents will happily continue to multiple clutch in the absence of their previous young when adequate food is provided.

For larger aviaries it is recommended to leave the young in with the parents because it provides behavioral stimuli and watching the family group move around through the shrubs and bushes together makes excellent viewing. The young can only be left with the parents in the aviary up until the start of the following spring when the next breeding season will start.

Fairywrens can be aggressive towards many finch species but can be housed with small parrots such as *Neophema* species and small ground birds such as quail. These, with possibly the addition of ground-dwelling reptiles such as blue-tongue lizards, can make an interesting "mixed species" aviary. It is important to remember that an adequate heat source (and UV light source if indoors) and sufficient shelter such as logs should be provided for most reptile species.

A word of warning: although they are not strong flyers, fairywrens are masters of maneuverability (much more so than finches), and, being small and fragile, a measure of lighthandiness should be exercised when attempting to net individuals. Even the most skilled and experienced aviculturist may knock and animal enough to stun and even kill them.

Feeding

The splendid Fairywren is essentially an insectivore in that they feed upon low-flying insects and insects gleaned from shrub foliage, dense undergrowth and leaf litter. Their dependency upon insect prey is exemplified by the well developed rictal bristles (stiff hair-like structures at either side of the mouth) that aid the capture of small aerial invertebrates.

Captive birds, if housed in a well planted aviary, can find livefood in their enclosure as well as consuming livefood supplied on a shelf or stand. Insect food can consist of a mixture of live mealworms, maggots, termites, vinegar flies, baby crickets and dead flies - most types are now commercially available. Fairywrens will take insectivore powder mixes and a number of softbill recipes. It is recommended that these are fed daily to ensure that the birds obtain their full dietary requirements while being supplemented with live insects. There are a number of excellent recipes for softbill/insectivore mixes on pages 231-233 of Mark Shephard's book Aviculture in Australia (chapter 9).

A basic softbill mix can consist of mashed egg, grated cheese, crumbled madeira or orange cake mixed with fly pupae. It is important that the birds have adequate food available at all times as these birds have high metabolic rates and can become easily stressed in a short period of time without food.

Breeding in Captivity

Once a breeding pair have established a territory, breeding duties are performed by the female who is responsible for construction of the nest and brooding the young. The nest construction consists of a loosely hanging bag suspended in low dense vegetation where grasses and twigs are woven together with the nesting chamber and entrance hollow lined with soft leaves and downy feathers. In captivity the birds will utilize other materials provided such as dry grass, coconut fibre, human hair, and horse hair. It is always important to provide a range of nesting materials placed either on the ground or in bushes so that the birds are able to choose what they want to use.

The breeding season for the Splendid Fairywren occurs from September to January [in the Southern Hemisphere] and usually 3-4 white eggs with reddish brown spots are laid. The eggs are incubated by the female for between 13-16 days and the chicks are naked when they hatch. The young are altricial and are thus totally dependent upon their parents for the first three weeks.

The nesting chamber is kept immaculate with fecal sacks from the young removed and discarded some distance from the nest. The young will fledge after about 12-14 days and are barely able to fly when they leave the nest. The young will sit in a bush often together, and in close proximity to the nest, whilst being continually fed by the parents for a week or two until they are strong enough to become independent. In many cases, the young from previous broods will help the parents to raise any young chicks of successive broods. This assists a breeding pair to raise a number of clutches in a breeding season.

Although this species has adapted well to the captive environment where some birds have become tolerant to the invasion of privacy by their owners, many other captive specimens have remained very shy. For this reason it is unwise to disturb birds that are thought to be undertaking breeding activity. The parents are very protective of their territory and nest site and become vigorous defenders of their young in the nest. This is typified by agitated behavior and strong vocal warning calls. This behavior can sometimes be used as an indication for the presence of young in the nest without disturbing the nest site.

Another behavior typical of fairywrens is the "rodent run" which is portrayed by an animal hopping along the ground with its head straight forward and tail out horizontal. This is thought to be a "decoy" mechanism which occurs in the presence of a threat to the nest, or young, where a parent bird or helper will perform the rodent run in an attempt to attract the attention to itself.

Summary

The Splendid Fairywren, and fairywrens in general, do not necessarily have to be difficult aviary tenants, but only require a little more intensive management than most other commonly kept bird species. The misconception developed by many people that high prices reflect the difficulty in housing and breeding should be dispelled and it should be recognized that prices only reflect the current private market trends and availability of a species.

It should also be remembered that as aviculturists we understand that all birds species in captivity require the same amount of "moral" responsibility and commitment and adequate research prior to purchase. We urge that aviculturists don't become deterred by high prices, and that they take up the challenge to acquire and breed this species for themselves, as this will provide greater opportunity for others in the future.

We can certainly recommend to those who have experience in aviculture that you should consider creating a planted, multi-species Fairywren aviary, as it will surely expand your experience and knowledge, and make for a perfect addition to your collection.

Bibliography

and Recommended Reading

- Baskerville, W. 1987. Splendid Fairywren. Western Australian Avicultural Magazine, 17-19.
- Baxter, E. 1980. Wrens in Captivity. Bird Keeping in Australia, 95-96.
- Blakers M, Davies, SJJF, & Reilly, PN. 1984. The Atlas of Australian Birds. RAOU & Melbourne University Press, Melbourne.
- De Graaff, T. 1997. Australian Doves, Waterfowl, Quail and Others -Population Trends in Victoria. *Australian Aviculture*, 254-259.
- Hale, S. 1995. Superb Fairywrens. Australian Aviculture 49(6): 125-127.
- Hutton, R. 1985. Splendid Fairywrens. Bird Keeping in Australia, 5-7.
- ISIS. Abstract Report. December 31 (1997).
- Shephard, M. 1989. Aviculture in Australia. Black Cockatoo Press, Prahran.
- Schodde, R & Tidemann, SC. 1990. Reader's Digest Complete Book of Australian Birds. Readers Digest Services, Surry Hills.
- Schodde, R. 1980. *The Fairywrens. A Monograph* of the Maluridae. Lansdowne Editions, Melbourne.
- Wurst, I. 1982. Superb Fairywren. Bird Keeping in Australia, 131-134.

From Australian Aviculture, June 1998 revised and edited for AFA Watchbird