## The Orange Chat Breeds in Captivity

The Orange Chat (Ephthianura aurifrons) is a spectacularly coloured insectivorous bird of the arid Australian interior, where it is most likely to be seen on samphire or saltbush flats around salt lakes.
Very little is known about the breeding habits of the species and so the following report from Police Sergeant A.V. Middleton of Wiluna Police Station provides useful information on the life cycle of these birds.

Sergeant Middleton had kept two pairs of Orange Chats in captivity for approximately three years during which they showed no sign of breeding.

After his transfer to Wiluna in June 1978, he constructed an aviary of pipe and wire $12^{\prime}$ square and $6^{\circ}$ high, and planted it with salt bush, cotton bush and various types of grass. The bushes were planted around the outer perimeter of the aviary to give the birds the maximum open ground to walk around.

During the 1978-79 breeding season in the Wiluna area very little rain was received and the chats continued to show no sign of
breeding, although wild birds were found breeding east of Wiluna during February 1979.

In January 1980, the drought broke in the form of two cyclones, Wiluna received heavy rain, which continued throughout the summer and well into the winter period, thereby increasing the insect activity in the area.

A light was rigged up over the aviary in the hope that the introduction of live food would trigger the birds into breeding condition.

This practice had to be stopped as not only did the moths and insects come to the light, but also Night-jars
which cause the Orange Chats to fly at night, this could have caused injury to them.

In May 1980, white ants were introduced to the birds as well as crushed boiled eggs and the diet they were used to.

One June 5, 1980, one of the cock birds was noticed feeding a hen, at regular intervals.

By June 20, the feeding cock bird had commenced to chase the other cock bird around the aviary, not allowing the other bird to feed or go anywhere near either hen and one pair of birds was removed from the aviary and confined to a small holding cage.

On June 28, the remaining cock bird was seen to sit in various positions in shrubs, calling the hen to him by soft shu-shu-shu type calls.

Mating took place on one occasion after which the cock bird chased the

V The brilliantly coloured male Orange Chat (Ephthianura aurifrons) (Photo - Copyright A.G. Wells)
(Insert) The female Orange Chat has a more subdued colouration. (Photo -- Copyright A.G. Wells)



A Distribution of Orange Chat in Australia.
hen around the aviary.
Couch grass roots were supplied for nesting materials which the hen used successfully and on June 30, 1980 a partly constructed nest was observed in cotton bush (in the middle of a bush approximately six feet from the ground).

During nest building the cock bird sat near and in the nest site, but was not observed to help with nest building. The nest was not lined with any soft materials and was completed on July 3, 1980, and remained unoccupied until July 6, 1980 while the cock bird continued to feed the hen on white ants and diet.

On July 7, 1980, one egg was observed in the nest, but the birds did not start sitting on the egg until the following morning, when the hen bird was observed sitting on the nest, and a midday inspection revealed two eggs.

At this stage a wire netting fence was erected around the aviary, to prevent children from getting anywhere near the sitting birds and thus disturbing them.

Both birds shared nest duties, the hen bird appeared to sit at night, but during daylight, the cock and hen took turns.
A "hide" was constructed some two metres from the aviary and any spare time was spent observing the birds from this position.

The door of the aviary was wired up and food was fed to the birds through the wire mesh, because every time the aviary was approached the sitting bird would leave the nest and put on a "broken wing act", falling all over the floor of
the aviary calling loudly "shu-shushu", the non sitting bird would also behave in the same way.

A total of three eggs were laid, they were mainly white in colour with reddish lines, at the larger end.

On July 21, egg shell was found in the water container and another egg shell was found outside the aviary near the water container.

On July 22, the third egg shell was observed on the aviary floor; all the egg shells were examined and found to have blood veins in them.

The hen bird was observed to be hunting in all the shrubs in the aviary, from top to bottom. When she had no success she attended at the white ant tray and filled her beak with white ants (not workers) then flew straight up to the nest site. The cock bird left the nest on her arrival and then carried out the same behaviour pattern.

Large quantities of grasshoppers, meal worms, moths, grubs and crushed boiled eggs, were fed to the birds. The insects were thrown through wire netting into all the shrubs in the aviary because if they were placed in one spot the birds appeared to kill the insects and leave most of them and feed very few to their young.

Moths and grasshoppers were collected at night from every available street light in Wiluna and placed in a wooden box covered with fly wire (if they were left in a bottle the insects appeared to sweat and die overnight). One wing of each moth was removed and the hopping legs of grasshoppers were removed to stop escapees from the aviary. Plentiful supplies of white ants were found in old railway sleepers around Wiluna and meal worms were sent from Perth from various friends, via plane or road transport.

Trips to the nest by both parents were frequent. On one occasion ten trips were counted in twenty minutes, with either a beak full of white ants, a couple of meal worms or a grasshopper or moth.

Droppings were removed from the nest by feeding parents and carried to various areas of the aviary.

By July 26, 1980, the young birds were approximately one inch long and were nude except for white down on their heads and bodies, and they appeared to be transparent. Their gape was very yellow and pronounced.

The three young had pin feathers and were starting to move around the nest by July 28, 1980.

On August 5, the young left the nest, fully feathered with the exception of their pin feathers around their beak and forehead. The young birds were extremely pale in colour in comparison with wild-bred birds, probably due to the type of food fed to them.

When the young first left the nest they were unable to fly, they fluttered to the further perimeter of the aviary and sat separately under bushes.

On August 6, one young bird drowned in the water container.

The remaining two young birds commenced to fly around the aviary on August 9, and followed their parents (mainly the cock bird).

On August 10, diet food was taken by the young birds and they commenced to drink water and started to pick up white ants.

The parents would call the young birds from the tops of bushes when they had food with shu-shu-shu type calls, and the young would answer with soft similar calls.

Following this initial success Sergeant Middleton had one other successful breeding of Orange Chats later in the 1980 season resulting in five more young birds reaching maturity. He is now experimenting with adding canary colour food to their diet in an attempt to produce the brilliant colours found in the wild birds.

## Editors Note

Police Sergeant Middleton is the holder of a special license issued by the Department of Fisheries and Wildlife permitting him to keep Orange Chats in an aviary. As Orange Chats require a continuous supply of live insect food (if they are to remain healthy and breed) they are NOT a suitable aviary species for
the inexperienced aviculturalist.
A free information booklet entitled "Licensing Requirements for Keeping Aviary Birds" is available
on request from the Extension and Publicity Office, Department of Fisheries and Wildlife, 108 Adelaide Terrace, Perth and provides a guide
to the licensing requirements and controls on bird keeping and trading in Western Australia.

