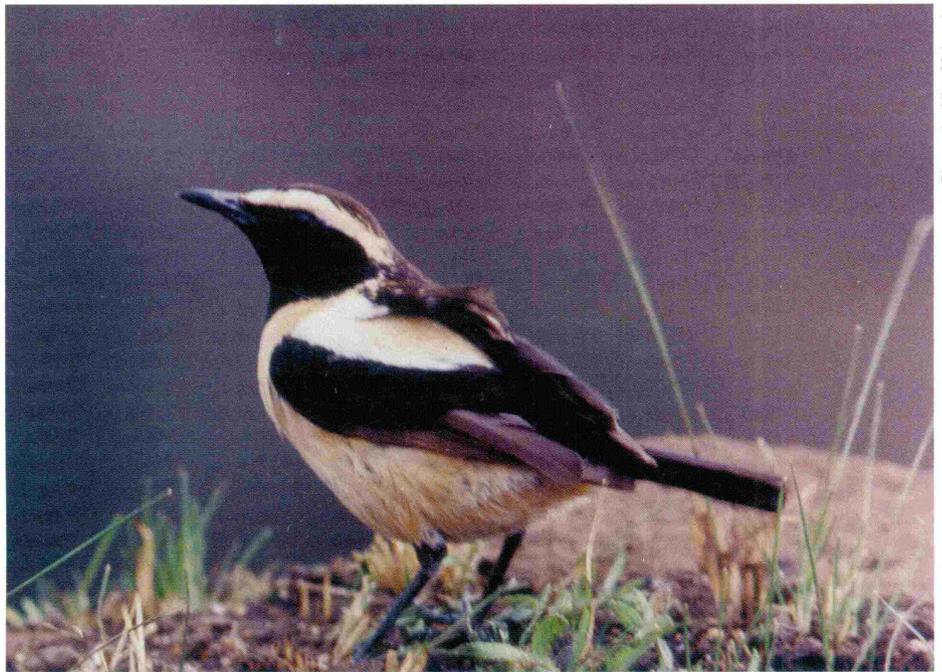


Chats

Glen Holland, Auckland, New Zealand

The 30 species of chat and 17 species of wheatear belong to the sub-family Cercomela which are part of the fan-Lily Muscicapidae that includes robins, shamas and redstarts. These all belong to the order Passeriformes. Most species prefer cliffs and old quarries where there are plenty of large boulders interspersed with clumps of bush. They hop and glide from one boulder to another and, immediately after landing, the mocking chat's tail, for example, is raised giving the appearance that the bird has over balanced. The familiar chat in turn flits its wings a few times after landing. They tend to sit on the top of the highest boulders or shrubs from where they have a clear view of their territory. Stonechats are birds of open scrub and grassland and a number of other species live in dry scrubland in Australia and Africa. The calls of chats vary greatly and some are excellent mimics with a loud song.



Buff-streaked Chat from South Africa

They adapt well to captivity, but newly acquired adults can be a little delicate and stubborn when adapting to substitute foods. By initially holding wild birds in small cages with soft shade cloth fronts and also by mixing livefood into the substitute foods, they soon learn to take these and adapt to captivity. Hand raised birds however are easy to feed and will accept most softbill formulas. As they are territorial, only one pair of a species can be

housed in an aviary. It is possible however to mix species which are dissimilar in looks and habits. I have not noticed any serious aggression between chats and other occupants of an aviary, and the pairs tend to keep much to themselves. During courtship the male can be very aggressive towards the female who can sometimes also show limited aggression towards the male. Ideally birds should be paired when young and out of the breeding season. They are extremely quick to snap up insects and this will sometimes result in larger, competing species such as starlings chasing off the chats at feeding times.

Chats prefer a large but lightly planted aviary, which includes rocky outcrops into which they will retreat if threatened. The landscape should be planned according with their natural habitat but for most species low shrubs interspersed with open sunny areas, rocks, and tree stumps will provide suitable habitat. From these vantage points they will "hawk" insects in the air and also drop to the ground where they pick up crawling insects. The males will spend much of their time displaying and calling from these favorite vantage points. Males also tend to sometimes chase



Tractrac Chat at the nest.

females but this seldom results in serious fighting.

They are usually the first birds to give the alarm call if, for example, a raptor flies over, and the other birds in the aviary soon learn to take cover when the chats alarm call is heard. This generally high pitched call can be a little irritating, as the other birds tend to panic when the call is heard. Chats are fond of bathing and a shallow pool of water should be available for this. They are willing nesters, but will not nest if the inhabitants of the aviary are incompatible or insufficient livefood is supplied/available. Chats are relatively hardy birds, which are able to withstand overnight temperatures down to freezing. They do however require day-time temperatures in excess of 8°C (46.4°F)

In severe climates, which do not meet the requirements described, they should be housed indoors with some additional warmth.

Chats are naturally almost entirely insectivorous but in captivity they will feed on soaked cat kibble, fresh bonemeal, commercial softbill food, minced ox heart, a variety of insects, and a little fruit.

The following diet can be prepared in bulk and frozen in the proportions as required per day:

- 4 cups of commercial softbill mix
- 2 tablespoons glucose
- 2 teaspoons calcium supplement (powder)
- 1 teaspoon multivitamins
- 1/2-teaspoon minerals and trace elements formulated for avian species
- 3 cups water
- 1 teaspoon cod liver oil

ADD: -

- One ox heart – cut off all fat and then mince.
- 4 hard-boiled eggs / grated with the shell.

Livefood is always their favorite and to assist in taming the birds, livefood is best fed by hand. In time

they will come to the hand to receive this. Large insects are usually beaten into pieces on a rock or a stump. Australian Orange Chats fade after years in captivity and in order to maintain their color they can be fed color food as is used for red factor canaries.

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During courtship and incubation, in some species, the male will feed the female. For many species, a wooden box, the size of Budgie nest box with a half-open front, should be supplied. A large jam tin with half the front covered will also be accepted but should be placed in the shade. Some species however, such as the stonechats, prefer to nest on the ground in amongst some vegetation. The nest is cup shaped, built of grasses and rootlets and lined with animal hair. The 3 - 4 eggs are pale greenish blue with some rust colored freckles. Both sexes incubate for 16 days and both assist in feeding the chicks, which fledge at 20 days. Fecal sacs are removed from the nest. They do not tolerate nest disturbance well and are easily evicted from their nests if housed with larger softbills.

Many species such as the Australian Orange Chat perform a very convincing "broken wing act" when the nest site is disturbed. To ensure success I would advise that the first clutch of chicks be removed

for hand rearing at eight days of age. The birds will soon lay a second clutch, which can be left with them. If young birds are left for the adults to rear, a good supply of livefood is essential. Within six weeks of fledging the chicks are best removed to avoid persecution from the parents.

Chats are relatively easy to hand raise and are best removed for hand rearing after at 7 - 10 days of age. The following guideline should be followed for rearing to day 10 - having reached that stage there should not be any further problems.

The incubator should be set at 37.2° C (99° F) and a relative humidity of 57-60 %. Eggs should be turned at least seven times per day. In incubators, which automatically turn eggs with rollers over a mat should have the delicate eggs resting on paper towel. At the first external pip, the turner is switched off, or the eggs moved to a dedicated hatcher. Eggs are hatched at the same temperature or very slightly lower than described for incubation. Eggs usually hatch within eight hours of the first external pip, often hatching within a few hours of the first pip. After six hours the chicks are moved to a brooder with a temperature of 36° C (96.8° F) and 65 % humidity. The first droppings are small and green / blue colored resulting from the yolk absorbed shortly before hatching.

Handrearing

Day 1: The chicks are placed together in a bowl lined with paper towel with some wood shavings to provide some grip. The bowl is then placed in an incubator set at 36° C (96.8° F) . The chicks are naked and pink in color. After 3 - 4 hours the chicks are fed a few drops electrolyte solution every hour for the first 4 feeds. Thereafter the chicks are given a little commercial hand rearing formula and hard boiled egg yolk to which warm water is added to the point where the food had a

firm porridge consistency but could be drawn into the syringe with ease. The first feeds are given with a small insulin syringe. Each feed consists of 0.2ml of food. Feeds are given hourly 6am - 10pm. and the chicks begin to voluntarily beg soon after hatching. Nest liners changed three times per day.

Day 2: Temp: 35° C (96.8° F). The chicks beg eagerly for food and if the droppings are rather loose, begin to add finely diced heart, waxmoths, mealworms and whole crushed mealworm beetles or pinhead crickets. These items are dipped in the moistened commercial rearing food and fed with a forceps tweezer. One solid food item is added in addition to the 0.2 ml of rearing food given at each feed.

Day 3: Temp: 34° C (95° F) decreased from now on by 1° C (1.8° F) per day until an ambient temperature of 25° C (77° F) is reached at which stage the chicks will be well feathered and able to regulate their own temperature. The chicks' droppings begin to improve and show the typical $\frac{2}{3}$ brown and $\frac{1}{3}$ white color which a healthy passerine chick should produce. The diet is slowly changed to include small strips of ox heart dipped in the moistened rearing food and a portion of commercial softbill food. This food is fed with a forceps tweezer and easily swallowed by the chicks. A soluble multivitamin and a calcium/phosphorous supplement are added to the rearing food. The chicks should be taking two food items at each feed. A bowl of water is maintained in the brooder to ensure that the chicks do not dehydrate.

Day 4: The droppings are now produced immediately after each feed, in a fecal sac which was $\frac{2}{3}$ white and $\frac{1}{3}$ brown in color. These fecal sacs are strong enough to be removed with a tweezer and thus ensure good hygiene is maintained.

Some fruit in the form of grated apple, diced paw-paw, and banana is added to the diet and eagerly consumed. At each feed three to four food items are taken and $\frac{1}{2}$ of the entire diet now consisted of heart strips dipped in rearing food and the rest of fruit and insects such as diced mealworms, small crickets and moths. The chicks are at an awkward stage where the belly and stomach had become large and they sway from side to side while begging for food. Feeds are now given every one and half-hours and the chicks are stimulated to beg by giving it a soft blow or making a squeaking sound with the lips. While begging they give a high pitched call.

Day 7: Temperature: 31° C (88° F). The eyes begin to open and the first quills appear on the back and wings. Nest cleaned at least five times per day. The chicks' gapes also gather softfood and this should be cleaned off with a cotton wool bud and warm water, twice per day.

Day 10: Temperature: 28° C (82° F). The eyes are wide open and quills appear on the flanks and crown as well. The size of the food items is increased slightly. At this stage they are still fed every hour and a half and consume up to four food items per feed. Their calls were quite loud at this stage.

If chicks are removed from the nest when half feathered they will begin to beg for food within 12 hours. A forceps tweezer and a thin syringe, which has the narrow tip removed, are used for feeding. The chicks are fed hourly when small and this can be reduced to every two hours once they are well feathered. They will begin to peck at food about five days after fledging but still require hand feeding for two weeks. A dish with a variety of foods as mentioned above should be supplied from five days after fledging onwards. ❖