# Conures

by Thomas Arndt, Bretten, Germany

he term "Conure" is not agreed upon by all concerned. It derives from the former genus Conurus, which was later replaced by Aratinga. The name conure is used today as a general term for South and Central American small and medium-sized parrots with long tails and comprises of seven groups.

The largest are the *Aratinga*. These are mainly medium-sized with a bare periophthalmic ring, a powerful bill, and a long, pointed tail. Taxonomists are inclined today to subdivide this genus. For example, the Queen of Bavaria or Golden Conure has been put into a genus of its own – *Guaroba*.

The *Pyrrhura* form another grouping of conures with many species and subspecies. They are generally small birds with a fairly wide bill and a bare periophthalmic ring. It is probably the oldest representative of the long-tailed parrot in South America.

Another group related to *Pyrrhura* with just two species is the *Enicognathus*. Both species are medium-sized parrots with a small bill, which in the case of *E. leptorhynchus* is very elongated. The cere is feathered.

Four further single-species genera are also regarded as conures, *Nandayus* with a bill that is longer than it is deep, *Leptosittaca* with elongated lore feathers, *Cyanoliseus* with a fairly small bill, covered partly by the cheek feathers, and *Ognorbynchus* where the bill is deeper than it is long. Biochemical investigation of the latter has shown that it actually belongs to the *Aras*.

### **Distribution of Conures**

The distribution area of the various conures stretches from Sonora in Mexico, where Brewster's Green Conure *Aratinga holochlora* brew-

steri is to be found, south through the whole of Central and South America to Tierra de Fuego where the Austral Conure *Enicognathus ferrugineus* occurs. Various habitats are occupied in this huge area. They range from rain forest to open savannah and very arid areas to humid tropical climate. The individual species prefer certain types of habitat, but there are always exceptions at least in the two groups with the most species.

Aratinga and Nandayus occupy generally savannah and open woodland, the White-eyed Conure Aratinga leucophthalmus and the Dusky-headed Conure Aratinga weddellii are mainly to be found in the Amazon forests.

Representatives of the *Pyrrhura* group mostly prefer open and denser forest with the exception of the Greencheeked Conure *Pyrrhura molinae* which is found in the drier savannah areas of southern South America.

Leptosittaca and Ognorhynchus occupy the montane forest of the Andes and Enicognathus the forests of the temperate zone in Argentina and Chile, while Cyanoliseus prefers the bare open country of Argentina, often without any trees.

Most of the conures live in low-land areas, although a few such as the Brown-breasted Conure *Pyrrbura calliptera*, the Yellow-eared Conure *Ognorbynchus icterotis*, the Golden-plumed Conure *Leptosittaca branickii* or Chapman's Mitred Conure *Aratinga mitrata alticola* are found in the montane and cloud forest of the Andes of Peru, Ecuador or Colombia up to 3,400 metres (11,200 ft).

The success of the conures lies in their extraordinary adaptability. A few species have however specialised in certain habitats. The Yellow-eared Conure *Ognorbynchus*  icterotis relies on areas with wax palms which grow between 2,000 and 3,400 metres (6,600 and 11,200 feet) in the Andes. The Slender-billed Conure Enicognathus leptorhynchus lives in the Nothofagus and Araucaria forests of its homeland, the Patagonian Conure (Cyanoliseus sp.) the dry areas of Argentina, and the Margarita Conure Aratinga acuticaudata neoxena lives in the few square kilometres of mangroves of the island of Margarita.

Other species are only found at certain altitudes such as the Roseheaded Conure *Pyrrhura rhodocephala*, which lives in the forest areas of the Venezuelan Andean foothills between 800 and 3,050 m (2,600 and 10,000 feet).

If two or more species occur in the same area they almost always occupy different niches. Four conures are to be found in the southern part of the Amazon area. The two Pyrrhura species are to be found in the interior of the forest with trees up to 25 m (82 feet) in height, with the Pearly Conure P. perlata mainly in secondary vegetation and the Painted Conure P. picta more often in the denser forest. The two Aratinga species in the area have also divided the forest up. The Dusky-headed Conure A. weddellii prefers trees 30 metres (100 ft) in height, whereas the White-eyed Conure A. leucophthalmus prefers trees 35 m (115 feet) high.

Another example is the Peach-fronted Conure *A. aurea* and the Cactus Conure *A. cactorum* in east-ern Brazil. The former inhabits the evergreen valley areas while on the other hand the latter prefers dry hill-sides. As in the first example, direct competition is avoided.

#### Life in the Wild

There is relatively little known about the life of conures in the wild. During the day the otherwise very noisy birds are often very shy and quiet. They are therefore difficult to detect. Most species are in addition well camouflaged and even the bright yellow Sun Conure *Aratinga solsti-*

tialis is not conspicuous from a short distance in its for the most part very dry habitat. Most species are only noticeable in the early morning and late afternoon when they fly screeching to and from their roosting places.

A few species are, however, to be seen virtually throughout the day. The Brown-throated Conure A. pertinax, for example, or the Nanday Conure Nandayus nenday. Conures can also be seen more readily in areas where they are not persecuted. The Pantanal is a good example where you are certain to see conures throughout the day.

In general, the daily routine of conures is determined by the typical behaviour found in nearly all parrots. From about 6:00 A.M the birds fly to their feeding areas, although the actual time of departure can vary according to species. Whilst the White-eyed Conure A. leucophthalmus begins its day around 6:00 A.M. the Dusky-headed Conure A. weddellii does not leave until around 7:00 A.M. If the weather is very wet, these times are delayed somewhat. The main feeding time occurs between 8:00 and 10:00 A.M. Then in many locations the conures fly to places where they take up mineralrich soil, drink, or bathe. From 11:00 A.M. to 3:00 P.M. the birds rest with virtually no activity in the midday hours. These rest periods assist in conserving energy, but are also used for intensive grooming. Between 3:00 and 5:00 P.M. they feed again, after which they return to the roosting places. At sunset – between 6:00 and 7:00 P.M. - the birds begin to quiet down for the night. However, calls and small squabbles can occur until around 8:00 P.M.

During the day most Pyrrhura and Aratinga species move around in small family groups or very small flocks of two to 12 birds. These groups often come together on fruitbearing trees and then there can be gatherings of several hundred birds. A few species, however, seem to fly around regularly in larger groups, although often these are immatures. This has been observed in Finsch's Aratinga finschi and Conure Patagonian Conures (Cyanoliseus sp.) with gatherings exceeding more than 1,000 birds. Living in a flock makes sense. It provides increased

protection against raptors. Some species such as the Austral Conure Enicognathus ferrugineus have been observed with sentinel birds, which watch over and warn the flock if it is feeding on the ground or is in territory that is difficult to survey.

The roosting places of most species are to be found in tall, often isolated trees. A few conures such as the Yellow-eared Conure prefer palms for roosting purposes, others like the Peach-fronted Conure often withdraw into large bushes. Such roosting places are retained for years and even decades and only species such as the Sun Conure, which are nomadic during certain months change them regularly.

Only a few species roost in tree hollows outside the breeding period. These include the Golden Conure as well as a few Pyrrhura species. Patagonian Conures roost in hollows in mud banks, into which the birds are supposed to fly with folded wings. The Red-fronted Conure Aratinga wagleri uses cliffs as roosting places and the Nicaraguan Green Conure Aratinga bolochlora strenua spends the night during the wet sea-

## HAL VOKATY

PRIVATE AVICULTURIST

P.O. BOX 1413 • TEMECULA, CA 92590 (909) 694-0755

## Best wishes! from Northwest Ohio Bird Club

P.O.Box 138168 • Toledo, Ohio 43613

Join us, our meetings are usually the first Sunday of the month at the Walbridge Shelter House on roadway Ave., across from the back entrance of the Toledo Zoo.

> For info. call: 734-269-2861 email: mickiandbird2@provide.net

## San Diego Bird Breeders

a Club for Breeders & Keepers of Birds P.O. Box 1462, Lakeside, CA 92040 760-789-3815



Come learn how to care for, feed, and breed your birds and meet new friends.

Visitors are always welcome. Bring a friend. Sorry, no birds.

http://clubs.yahoo.com/clubs/sandiegobirdbreeders

We meet the 2nd Friday of each month at Wells Center Activity Room 1153 E. Madison Avenue, El Cajon, CA Doors open at 7:30 P.M.

son in the crater walls of two active volcanoes.

Where conures are not persecuted they also occasionally visit towns and villages, where they roost in trees in the main squares. I observed this for example in Itacoatiara, where every evening thousands of Dusky-headed Conures alighted on the palms in the middle of the town.

## **Migrations**

Relatively little is known about the migration of South American parrots. One is often surprised to arrive in an area where a species is supposed to be common and find none. That happened to me with Sun Conures in the area surrounding Boa Vista. The year before they had still been seen there in August, but when I searched for them in April, I learnt from the local people that they actually only appeared in July and August for the maize harvest. This was not generally known until then.

It is known that the Blue-crowned Conure Aratinga acuticaudata remains in Colombia only from March until June. They are to be found in Venezuela for the rest of the year where they also breed. The Patagonian Conure provides another example. It migrates northwards into Uruguay in the cold part of the year, because the climate is milder there.

Other species are nomadic, although it is still not clear whether this applies only to young birds or is typical for all birds in the species. This behaviour obviously applies to Finsch's Conure *A. finschi*. The species has succeeded in settling the Azuay Peninsular in Panama in the last 10 years and the Nanday Conure has penetrated to eastern Bolivia. It is known that the Golden-plumed Conure *Leptosittaca branickii* has been absent for years in certain locations, only to re-appear unexpectedly again.

Most *Pyrrhura* species are sedentary, although some species are known to migrate between differing altitudes. Thus the Santa Marta Conure *Pyrrhura viridicata* moves

in the evening to lower areas where it is not so cold at night.

#### **Feeding Habits**

All the data gathered to date about the feeding habits of conures emphasises the high proportion of various fruit consumed. It must be said, however, that it is often only the seeds within that are eaten and not the pulp. Dry seed is only consumed by a few species and then mostly half-ripe seeds. The choice of food is very wide, ranging from the outer casing of palm fruits through berries, nectar and blossom to leaves or stalks.

Many seeds and fruits are eaten in unripened condition because of the competition from monkeys or other birds. Much of this food, however, has toxic content, which must be neutralised by the conures. This may be the main reason why many including numerous parrots. conures, fly daily to the "collpas" along the river banks to feed on mineral-rich soil. This assists in absorbing or filtering out the toxic element. There are fewer more spectacular sights than the famous "collpas" in the Manu National Park in Peru. Often they consist of just a few metres wide strip along the rivers.

The smaller forest dwelling species including many of the *Pyrrhura* visit "barreiros" – locations in the interior of the forest where mineral-rich soil occurs on the surface. Savannah species such as the Nanday Conure on the other hand seek out the soil alongside paths and tracks where they also probably consume the little stones needed to assist the stomach muscles in breaking down food.

When rearing young most species also seek out animal protein. Although little research has been carried out into this, it is at least known that White-eared Conures *Pyrrhura leucotis* forage figs infested with wasps for this purpose.

Many parrot species take advantage of agricultural activities although seldom to the delight of the farmer. Today no less than 54 of the 352 parrot species worldwide are regarded as pests and conures are very prominent in this list. Of the 44 species 20 are known to cause considerable damage to crops. It is believed that a further 10 species also forage in fields.

Surprisingly there are no food specialists among the conures as there are among Aras. The Red-bellied Macaw Ara manilata for example has specialised in feeding on the fruit of the buriti palm. Nonetheless there are seasonal variations. Pfrimer's Conure Pyrrhura 1. pfrimeri feeds almost exclusively off the flowers of the Tabebuia impetininosa tree at the height of the dry season in northeast Brazil and the Enicognathus species feed mainly on the seeds of Araucaria and Nothofagus trees.

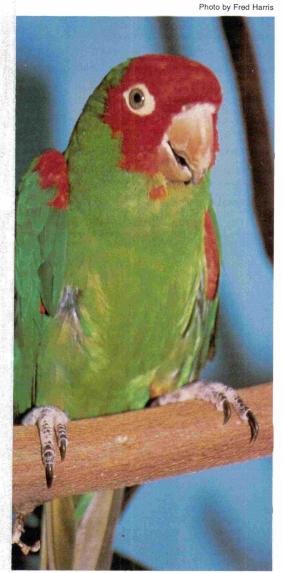
## Reproduction

Conures use hollows in the branches of large trees or in dead small trees for breeding purposes. They do not appear to be fussy. Larger species such as the Nanday Conure also breed in palm trees and the Yellow-eared Conure has little other alternative to palms. As nesting opportunity is very limited in many areas, some species use other possibilities. Aratinga wagleri uses crevices in cliffs, Patagonian Conures excavations in river banks and the Orange-fronted Conure Aratinga canicularis termite mounds. Occasionally conures select very curious nesting sites. Nanday Conures have been observed nesting in fence posts, the Nicaraguan Green Conure Aratinga strenua uses crevices in the craters of two active volcanoes and the Slender-billed Conure has been known to use twigs to secure its nest in cliff faces.

The beginning of the breeding season differs according to region, but is generally at the end of the dry period. If there are several conure species in one area, then the largest mostly breed first followed by the smaller ones. Thus the breeding period of *Aratinga leucophthalmus* in the Peruvian Rio Purus area is

between March and May and the smaller Aratinga weddellii from June to August. The reason for this is obvious. By dividing the period the species avoid competing with each other for nesting sites and food. The Pearly Conure Pyrrhura perlata has two breeding periods, whereby the second possibly serves to replace failure in the first phase.

Contrary to general opinion, only part of the population breeds. Information about this is, however, very meagre. Although between 37% and 60% of a population of the closely related Monk Parakeet Myiopsitta monachus breeds every season, in the case of the Yelloweared Conure it is less than 20%.



Red-masked Conure

The clutch size depends on the size of the species. The larger Aratinga species mostly lay 3 or 4 eggs, exceptionally 5, while the smaller species lay 4 to 5 eggs. The Golden-plumed Conure and the Yellow-eared Conure provide exceptions with clutches of 2 to 3 eggs whilst members of the Enicognathus group can lay up to 8 eggs.

Most species have no breeding territory apart from a small area around the nest that is defended against members of the same species. However several pairs of the Duskyheaded Conure have been known to nest in one tree. Two females of the Brown-throated Conure have even been observed brooding at the same time in a termite mound and the Golden Conure is known to breed regularly in colonies.

The incubation time lies between 23 and 24 days per egg, the fledging period between 7 and 8 weeks. The young are reared by both parents, except for the aforementioned Golden Conure where the young are fed together by several females. There is, in addition, an interesting observation of Yelloweared Conures, where a third adult guarded the nest and assisted in feeding the young.

Unfortunately there has not yet been an investigation of the breeding success of conures. It is believed that the loss rate is fairly high. The main causes are parasites, disease, nest predators such as snakes and toucans, heavy rainfall resulting in nest flooding, the collapse of rotten nesting trees as well as narrow entrance holes, and the shooting of the parents by hunters.

## **Threats**

Some one third of all parrot species are under threat, including many species of conure. The new Parrot Action Plan lists 95 species, but omits a few threatened subspecies, which may become separate species at a later date. As with most other parrots the main cause is habitat destruction. Many Pyrrhura species living in forest interiors are especially threatened.

However, the direct influence of people on the wild populations is not inconsiderable. A few species are still trapped for national and international trade although not to the same extent as during the 80s and 90s. Mostly the nests are robbed or in a few cases the birds are caught by nets or decoy birds. The robbing of nests has been practised for centuries by the indigenous population - the Incas for example ruled over a lively trade in parrot feathers, which were acquired in exchange for commodities from the Indians of the Amazon basin but it was the new settlers who svstematically continued the trade. In many locations the nest sites were broken open to take the young. thereby making them unavailable for further breeding.

A few of the larger parakeet species such as the Yellow-eared Conure were and still are hunted for the pot. Others like the Golden Conure are killed for their feathers and in some locations in Brazil and Colombia shooting parakeets is regarded as a sport, carried out for pleasure and extirpating entire populations.

All these factors have resulted in no fewer than 17 of the 44 conure species acquiring threatened status. Well-known examples are the Golden Conure, the Yellow-eared Conure or the Golden-capped Conure Aratinga auricapilla. Less known are the Hispaniolan Conure Aratinga chloroptera, the Goldenplumed Conure Leptosittaca branickii or the Greater Patagonian Conure Cyanoliseus bloxami.

For many species, keepers and breeders of conures have a special responsibility. They can not only maintain and enlarge the populations in captivity rendering the trade in wild birds unnecessary, but also in the case of a few species and subspecies ensure that they continue to survive. It would also be very desirable if more and more birdkeepers and breeders would support projects in the wild financially, especially for those species they claim to hold dear.