

Breeding Halfmoon Conures

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The Arizona Seed Crackers Society Halfmoon Conure Breeding Consortium is working with *Aratinga canicularis clarae*, the northernmost subspecies of Halfmoon Conures. Forshaw describes their range as being "confined to western Mexico from Sinaloa south to Colima and inland to western Durango and central Michoacan". Other "common names" include Petz Conure and Orange-fronted Conure. Halfmoons are similar in size and appearance to the Peach-fronted Conure, *Aratinga aurea*, but are readily distinguishable since the Peach-fronted has an all black bill (upper and lower) where the Halfmoon does not.

According to the 1991 Psittacine Captive Breeding Survey (p66), Halfmoons aren't among the more prolific conures. Of 26 pairs reported in the survey, 25 offspring were produced by 13 proven pairs. The same year 79 pairs of Peach-fronteds were reported,

of which 40 proven pairs produced 120 offspring. For Sun Conures, of 264 reported pairs 771 offspring were hatched by 164 proven pairs. This doesn't mean Halfmoons won't breed well in captivity, it means they haven't been the focus of as much effort as other species, and that they are more challenging. There is no "magic formula" when it comes to breeding Halfmoons.

In the ASCS Breeding Consortium, we have found pairs will frequently double clutch, but clutch sizes run small (usually two to four). So far our experience has shown that birds do not breed until three years of age. While this may not be true as a general rule, it has been the case with nine birds that were purchased under a year old and an additional six birds we have produced. This raises interesting questions about the life expectancy for Halfmoons, which might turn out to be rather long for such a

small bird. Our oldest producing pair was estimated to be at least 10 years or older when they produced their most recent clutch.

In the Phoenix, Arizona area, virtually all our pairs are kept in outdoor aviaries year-round. Since we are blessed with mild winters and extreme summers, no supplemental heat is provided during the cold months. During the summer, most facilities use misting systems to help moderate the extreme heat. Of course, the birds must also have access to a dark shaded area.

Our best breeding results have been in small flights or large cages, bigger doesn't seem to be better when it comes to cage size. Most of our breeding has been in cage sizes of about 18" x 18" x 36" long, 3' x 3' x 3' or 24" x 24" x 48". Nest boxes are hung outside the cage, and it seems to make no difference if the nest box is at the same end or opposite end from the food and water dishes. Birds that have bred once tend to go back again in following years, and multiple clutches seem to be almost the rule rather than the exception — particularly if chicks are pulled for handfeeding.

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Photos by Gary Clifton



The Arizona Seed Crackers Society has a Breeding Consortium of the Halfmoon Conure. They work with the subspecies *clarae*. Other names for the Halfmoon Conure include Petz Conure and Orange-fronted Conure.



ing Halfmoons, but a number of our Consortium participants have had successful breedings. Common factors at these facilities include a varied diet, pairs set up outside year round and held as pairs year round, presence of other species, and geographic location (Phoenix area).

As with any species, breeding success begins with adequate nutrition. Each of our participating facilities is free to feed a diet it deems most appropriate. With some variation, the usual is a "small hookbill" seed mix that contains canary, oat groats, millet, safflower and in some cases sunflower, buckwheat or both. In addition to the seed mix, each of our facilities reports feeding soft food which may include "bird bread", hard-boiled chicken and/or goose eggs (including the shell), a variety of peas and beans, corn, romaine lettuce, beets, carrots, prickly pears, apples, oranges, fruit cocktail and almost any other fruit or vegetable regularly eaten by aviculturists or their birds. Most of our breeders report feeding more vegetables than fruits, none report a diet limited to seeds or pellets, though some feed pellets in addition to seeds and soft foods.

Ultimately, what counts is what the birds eat, not necessarily what is given to them. Corn, beans and carrots seem to be favored over apples, citrus, grapes or other fruits, particularly when seeds are available as an alternative. Halfmoons do not appear to be as likely to get overweight as some species of Amazons or cockatoos. Some of our facilities feed everything every day, some feed seeds every day and soft food on alternating days. One facility cuts back on feeding through the summer and fall, then suddenly increases the amount and variety shortly before breeding season. Rations are increased again, especially soft foods, when babies are in the nest. Many of the pairs show a distinct preference for seeds until they start feeding babies.

One common factor to breeding success with Halfmoons appears to be cage size. Bigger is not better; we have yet to have a pair produce in anything as large as a 3' x 6' x 6' enclosure. A nice size is on the order of 18 to 24 inches wide, 18 to 24 inches high and 36 to 48 inches long. We have also had success in 36" x 36" x 36" enclosures. Every successful breeding

in the Consortium has had the bottom of the cage located from 30 to 60 inches off the ground. The key appears to be giving the birds enough room to move around, but not too much so they become insecure. The presence of additional pairs of Halfmoons or other species nearby does not appear to be a problem, though we thus far have been unwilling to risk a trial at colony breeding. Halfmoons are normally rather curious and bold, but the onset of extreme aggression is a good sign that breeding season has arrived. From about a month before eggs are laid until after the last young are weaned, Halfmoons typically become extremely aggressive.

Breeding successes have been reported in cockatiel boxes, budgie boxes and small conure nestboxes. One recommended box is a 7 to 8 inch square "grandfather style", 14 to 20 inches deep. A small entrance hole is used, if it is too small the birds will chew it out to fit. Wood shavings are commonly used for nesting material, typically packed down to a depth of about an inch or two — just enough to keep the eggs from rolling around. It is common to see both birds off the nest during the incubation period, and it isn't unusual to find both birds in the nest at the same time, although incubation appears to be done strictly by the hen. Most field research indicates Halfmoons in the wild nest in termite mounds. Informal reports suggest this may not necessarily be the case for *A.c. clarae*. While we haven't had a history of fertile eggs failing to hatch due to lack of incubation by the parents, one strategy we have considered for this is heating the nest box by hanging a heating pad on one side (on the outside). We have read about filling the box with cork so the birds had to chew out their own cavity, but we haven't tried this as of yet. Our greatest problem with nests failing has been egg eating by the parents.

In the Phoenix area, breeding season seems to run from January to May. Most producing pairs will double clutch during this period, starting the second clutch shortly after eggs or chicks are removed. The rest of the year the birds may or may not roost in the nest at night. Clutch sizes vary from two to four eggs, with no clear indication that the second clutch will be larger or smaller than the first.

Cockatiel sized closed-bands are used, but the timing is pretty critical on banding. Usually around two weeks old the chicks' feet are large enough to keep the band on, by three weeks it is probably too late to apply a properly fitting closed band.

Normal incubation seems to be on the order of 24 to 28 days, with a day or two of variation probably due to how tightly the hen sits and/or how much time she spends off the nest. Frequently, incubation doesn't start until the second egg is laid but there are some hens that start sitting with the first. Usually eggs are laid every other day and hatch the same way. Fledging occurs around six weeks, weaning is usually about two weeks later.

Handrearing Halfmoon chicks is like handrearing other small conures. Books have been written on the subject of handrearing and pediatrics. There does not appear to be any peculiar quirks or secrets involved for Halfmoons. Cleanliness and adequate nutrition are the two most important factors for handrearing any species, including Halfmoons. There are at least as many "preferred formulas" as there are handfeeders. One that has been used successfully with Halfmoons is a diet developed years ago by Dale Thompson. It consists of two parts Zu-Preem, one part Roudybush cockatiel mix and one part oatmeal baby food. Good results have also been obtained using commercially prepared mixes. Using a diet you know and trust is more important than using a particular brand name or formula.

Halfmoons are like other species in that a few pairs will breed no matter what, a few pairs will not breed no matter what, and most pairs will breed or not depending on the aviculturist. In all likelihood, most Halfmoons fall into the last category. Breeding Halfmoons can be an interesting challenge; simply throwing a pair of birds in a cage and giving them a nestbox will by no means assure results. Patience, proper management and an understanding of the particular pairs involved make a difference. While breeding Halfmoons can be a challenge, it is by no means difficult or impossible. There is, however, a greater sense of accomplishment in successfully breeding Halfmoons than there is working with less difficult species. ●