Breeding the Red-legged Seriema

(or Crested Seriema) Cariama cristata by Steven Collins, New Braunfels,TX Clear Springs Aviaries & Gardens

The Seriema has often been kept in Zoo collections and to a lesser extent in private collections. This species is a favorite for bird shows, where these (imprinted handreared) birds will demonstrate their killing techniques on rubber snakes. Still, very little information has been documented on the husbandry and captive propagation of this species.

The following information is from our notes compiled by observing birds in our collection over the past six years that we have kept the Seriema. This is not to say this is the only method used to breed this bird, but only one of many variations on the captive management of this species.

Birds' habits vary considerably in captivity, depending on the conditions they are kept in. As well as the birds background (health, genetics, rearing, techniques, etc.) parent-reared birds, as in all cases, make the best breeders. Hand-reared birds become extremely imprinted and will not know how to interact with another bird, making breeding unlikely if not impossible.

The Red-legged Seriema is usually a willing and free breeder once a compatible pair can be established. I believe it is best to try to pair birds that are close to the same age. This is because the male can be overly aggressive to females that are unwilling or unable to keep up with males' reproduction cycles. Young males may be too anxious for older females and older males may be too aggressive for younger females. The males of this species seem to mature sooner than the females. A male can fertilize eggs at the age of only eight months (possible sooner). We have had eightmonth-old males sire offspring. Females seem to mature a little slower and usually do not produce eggs until their second season, approximately one-and-a-half years of age. Although young birds are full size at three to four months, they still show some juvenile plumage until the end of the first year. There is not much difference between adult and juvenile plumage, but young birds will show more barring in the feathers as well as being a little lighter in color in some instances. The leg and beak will also be a pale color, getting brighter with age, eventually turning bright reddish orange.

Seriemas in prime breeding condition are generally more than willing to make an attempt to reproduce. Often birds that are alone will construct a nest in hopes of attracting a mate. This is true of both sexes, as males and female both build the nest. It is the male that generally initiates the breeding and reproduction cycle by becoming very attentive to the female. He will strut around with head cocked down along his neck, and offer food to the female, feeding her from his beak. The female will exhibit this same behavior in unison with the male, particularly when she is ready to receive him. The pair will often do this right before copulation takes place. This behavior is most prevalent during the breeding season. The pairs' "duet" of loud yelping calls, proclaiming territory and strengthening the pair bonds, resounds throughout the park. This loud calling is first priority before leaving the roost in the morning. The pair will continue to call periodically throughout the day.

Their breeding season begins in spring — late February through May here in south Texas. The breeding season depends on geographical location, as well as the weather. The weather obviously plays a role in reproduction. Our 1997-98 winter has proved that point. The extremely mild (E1 Nino) winter caused our birds to lay January 1st. We have never before had them lay this early.

Birds housed in indoor facilities may be confused and breed any time of the year. Generally by July-August, the reproduction cycle is completed. Some birds are sporadic in breeding and may produce offspring one year and skip the following season. This is most often true of older birds, coming to the end of their reproductive capabilities. I do not know the exact life span of a Seriema, but generally 20 to 30 years of age would be exceptional.



Red-legged Seriema Cariama cristata.

Reproduction at this age would be unlikely. Prime breeding age is between two to 15 years.

Once a compatible pair is established, nesting facilities should be offered. At least two nest sites should be offered so the birds can decide between them. Often they will build a nest, then abandon it and start another. Our nest boxes are approximately 2 x 3 feet around and about 6 to 8 inches deep. The boxes are hung about four to five feet from the ground. It is best to place boxes under some sheltered area of the flight.

When we see the birds carrying sticks around and showing signs of breeding, we offer them an assortment of twigs, branches, dried grasses, weeds, etc. They will even put clods of dirt in the nest to strengthen it, much like mortar. They will fill the box to overflowing capacity, building the nest above the box sides. Both sexes build the nest, but generally the male does most of the construction. This does vary though from bird to bird, but usually the male shows more interest than the female at this point.

Once the nest is completed and the female has made her final touches, egg laying begins. The eggs are laid every other day. Average clutch size is three eggs. Incubation is about 26 - 27 days, and the chicks hatch one to three days apart. I have found that most often, only two of the three eggs are fertile. It would be very unusual for our birds to hatch and rear three chicks in one clutch. I do not know the reason for this, but one egg, possibly the first one laid, is more often than not infertile. (This is at least true of our birds.) This may not be the rule for every pair. I'm sure there are some birds that have produced three chicks in one clutch but we have never had this happen.

Both sexes incubate the eggs, usually the male by day and the female by night. This does vary though, and often you will see both birds on the nest together. When the chicks begin hatching, they will be a day or two apart. The female will sit very tight at this time, and will not leave the nest, sometimes for three or four days. The male will sometimes feed her on the nest, and will show signs of being anxious to feed the chicks.

The chicks are helpless when hatched, but only for a short period of time, as their growth rated is extraordinarily fast. For the first couple of weeks, the birds should be offered plenty of live food to feed the young. In addition to our regular diet (which I will discuss later) we offer thawed frozen crickets, pinkie mice, jumbo mealworms and some type of prepared meat diet, sprinkled with Vionate or another vitamin supplement, in generous quantities.

The parents will feed the chicks in earnest, but precautions should be taken to make sure that all chicks are being fed enough. Sometimes younger siblings will be pushed away or overpowered by larger siblings and will require some extra handfeedings. We do this by sticking food directly in the chick's mouth, of course with many objections from the parents. They will puff up, growl, and screech at you, but they usually ultimately accept the help. Be careful, as Seriemas have strong beaks as well as a sharp hooked claw on their inner toe, which they use for



Red-legged Seriema on the nest.

defense.

The chicks will begins standing at about one to one and a half weeks of age. They will be walking around the nest comfortably by two to two-and-ahalf weeks. At about three to threeand-a-half weeks of age, the chicks will leave the nest and will walk around the enclosure with the adults. The chicks will begin to roost at night at this time. They can't fly yet, so they must be able to walk up to a roost. At this time, the parents seem to stop brooding the young and allow them to sleep on their own, but still under their watchful eye. Be cautions at this time, especially in bad weather, making sure chicks are not too cold or exposed to adverse weather conditions.

Because of the chicks' rapid growth, proper nutrition is imperative. Our diet consists of a softbill mix, which consists of dry cat kibble and/or dog food, diced fruits, hardboiled eggs, and sometimes, grated cheese. In addition to this, we add a raw meat diet: chopped beef heart, kidneys, ground beef, and canned Alpo dog food, chunky style. We also feed each bird two large adult mice daily, and an extra mouse for each chick. The parents shred the mice into small enough pieces for the chicks to eat. At three weeks to one month of age, we stop giving cricket, pinkies, and just give adult mice and let the parents do the work of preparing them for the chicks. We give approximately two cups of softbill mix, one cup of meat diet or dog food, in addition to one mouse per bird, twice daily.

At about three months of age, the parents will begin weaning the chicks by making them pick up food for themselves, instead of feeding them from their beaks. The chicks will begin eating from the feed pan with parents, and are quite capable of swallowing whole large mice. At three-and-half months, the chicks are almost fullgrown. At this time, they should be feeding themselves and be capable of caring for themselves. At four to five months, we pull our chicks from the adults and move them to their own enclosure. Doing this gives the adults a break, and often sets them back to work on second clutch. While two clutches per year is average, it is possible to get three clutches per year, weather permitting.

The Seriema is an extremely hardy species and doesn't seem to be bothered much by cold. Although here in Texas, temperatures seldom dip under 20°F., we have had Seriemas roost through 15°F. weather with no apparent harm. A good windbreak is necessary and a heated shelter should be offered, especially in extremely cold climates. We do not lock our birds in during cool spells, but let them choose whether or not to use their shelter. Surprisingly enough, they choose to sleep outside more often than in their shelter. However, their long legs are susceptible to frostbite, so again, be cautious in cold climates. If properly fed and good health is maintained. there should be little if any health problems.

Their enclosure should be large, the longer the better. Our enclosure is $25 \times 15 \times 8$ feet. While it is possible to get birds to breed in smaller enclosures, they should have as much room as possible to exercise those long legs. Leg problems can occur in young birds due to improper diet and lack of exercise, but we have never had this problem.

I hope this will give a little information of captive management of Seriemas. These birds are extremely interesting and can be quite entertaining. Some birds become very tame to their keepers and will often take food from your hand. Hand-raised birds are extremely imprinted and not good breeders, and they are often used for bird shows. This practice does not benefit the species and proper captive propagation and management is always best.

Interest in Seriemas has increased in the last couple of years, as birds are becoming harder to find in the U.S. Hopefully this renewed interest will help preserve this species for the future. The Seriema adapts well to captivity and ease of care should make the Seriema a valued member of future collections. Seriemas make great exhibit species and their calls are very intriguing.

If you have questions or comments, or if you know where we can find any Black-legged Seriemas please call Steve Collins at (830) 606-6029.