

Demoiselle Cranes (*Anthropoides virgo*) and their breeding.

Paul Wexler

The Demoiselle crane is at 90cm tall the smallest of the cranes and probably the most commonly kept crane species in the UK and understandably so with it having a grace and elegance that is more alluring than other cranes.

The cranes are listed in the order *Gruiformes* relating them to Rails, Bustards and Seriamas amongst others, there are 15 species in the family ranging 4 genera. The genus *Anthropoides* has one other species in it and that is the Stanley or Paradise crane (*A. paradisea*) which is also a particularly elegant crane though not as readily available in aviculture. Both of the species in this genus have completely feathered heads and it is this particularly, that distinguishes them physically from all the other cranes which, to some degree have bare facial skin.

The Cranes are present on all continents apart from South America and perhaps more obviously Antarctica, the Demoiselle specifically breeds across northern Asia and also occurs in India and eastern sub Saharan Africa. They frequent grassland close to waterways where they feed mainly on seeds, but will also eat many terrestrial and aquatic green foods and invertebrates. Throughout the non-breeding period Demoiselle cranes can form sizeable flocks though they are fiercely territorial when it comes to breeding season.

Nests are not much more than shallow scrapes usually in quite open aspects and scantily lined with plant matter and small stones. Two rusty marked blue green eggs are normally produced and these are incubated alternately by both parents for about 26 days. In the UK the first clutches are laid around the last week in May and the first week in June.

Breeding may always have its elements of trouble, but in captivity there are additional problems. These may be related to either the situation of the nest (i.e. it may be open to predation even though the parents should be naturally vigilant and defensive); disturbance from other aviary or paddock occupants; and in public collection the pressures of continued observation. To this end it has been necessary in some circumstances to experiment with breeding techniques.

It has been possible over past seasons to try different methods of producing crane chicks and in each case the first clutch is collected as it is produced. The eggs can be removed for artificial or foster incubation leaving the parents in a position where they should recycle and lay again. The period of recycling should be about ten days if the eggs are taken at the time of laying. If they are taken after they have been incubated for a length of time by the parents then the period of recycling may increase. Initially the reason for taking a first clutch might simply be to increase the chances of producing chicks by trying methods of hand rearing, foster rearing and/or parent rearing, but it is possible to take the first eggs as a move to increase parent rearing.

Hand rearing has on many occasions proven to be an adequate method for rearing young cranes though it is comparatively time consuming and can produce birds which are imprinted, especially if chicks are reared alone. The incidence of aggression to keepers increases with imprinted birds as well as possible problems in pairing up for adult life so it has its limitations.

However, it is possible to employ the techniques for hand rearing for the first few weeks of life with a view to returning the chicks to their parents when their second clutch of eggs has hatched.

For the first weeks of the first brood of chicks (hopefully both eggs have hatched) they will need to be kept under a source of artificial heat such as a suspended bulb. They can be offered food in the form of dry pheasant pellets, chopped green food and some form of live food. Feeding should not be started for about 24 hours after hatching, chicks may not even start to stand for up to 48 hours during which time the chick will be reliant on its yolk sac. It is necessary to offer food items to a chick with a pair of tweezers or even just fingers so that they can begin to learn what food and feeding is about, it is also important that chicks do not exceed a weight gain of about 10% each day as this can cause leg development problems. To this end chicks need to be walked regularly for perhaps five minutes a time at the beginning building up to thirty minutes after a week or so. As long as the weight gains are regulated and the chicks exercised sound growth should be achieved without too much trouble. It is worth bearing in mind that sometimes for often no obvious reason two chicks being hand reared might become aggressive to one another and it might be necessary to separate them.

During the time that the first two chicks are being hand reared, the parents should have recycled and be a good way through incubation. After 24 hours of the first of the parent incubated eggs hatching (presuming that both eggs are fertile) the chick can either be left with the parents while the second egg hatches; removed to be artificially brooded for a further day or moved with the father to a separate rearing unit. Initially a shed type shelter is sufficient for housing the birds. This is a delicate time for the adult birds, but will only take as long as the last egg takes to hatch. In a natural environment the cock bird will often take off with the first chick for short time usually returning before too long to the hen. The hen and last chick are moved as soon as hatching is completed.

The reason for moving the adults with their brood helps to prevent loss of the newly hatched birds from predation or inclement weather, but more importantly they are better placed for taking on their original two chicks. As hand reared chicks will follow almost anything that cares to wait for them and parental cranes respond well to the calls of chicks it is possible to replace hand reared chicks back to adults, as parents they will also offer live food to all of their chicks even though in this scenario the hand reared birds are bigger. The main problem comes with brooding as hand reared birds at this stage will not have sought heat from underneath another bird, but from maybe a heat lamp. It is therefore necessary to place a recognisable heat source for the hand reared brood to keep warm. They will eventually brood

naturally under the hen in their own time, in my experience this will happen after few days, though it makes sense to continue nightly lock ins for at least four to five weeks.

The rearing process needs only for the adult cranes to be good parents. Allowing them the run of a stretch a lawn they should happily rear their increased sized brood quite naturally, the hand reared birds soon loosing any imprintedness that they may have had.

Although timing is often critical in getting this method right, it has proven to be successful for a number of broods of Demoiselle cranes. Although this species may not need this increased level of breeding help I believe that it would be a valuable technique for rearing more conservationally sensitive species