# Beginning Breeding Budgerigars

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TYPESETTER ERROR — page four was inadvertently omitted from the original text when the following article was typeset. The following text has been corrected and includes the omitted page which should have been inserted on page 10 of the Oct/ Nov '93 issue of "Watchbird."

#### PART 1

Since it is unlikely that all Budgie hens will be in breeding condition when the majority of cocks are, it is a good rule of thumb to have extra females on hand. The likelihood that only a few hens will be suitable for breeding at any given time can delay your breeding plans unless you overcome the contingency by obtaining more hens than cocks in your foundation stock. This plan can be used advantageously if you have an exceptional male which you wish to use with several quality hens, either fostering out the offspring to foster pairs set up for that purpose, or allowing the cock to remain with his last mate of the season to rear his own chicks.

Although many beginners prefer to start with the less expensive "American" pet stock variety from which to learn from their mistakes, it can be an advantage to retain a few of the larger "English" or exhibition size birds. Such birds when crossed together can produce a wonderful, larger-size pet bird, informally known as the "English-American cross."

Nor should one mistake such crosses as hybrids since they are all (e.g. "English," "American," or "crosses") of the same species, Melopsittacus undulatus. The size difference, or color and feather mutations in Budgerigars for that matter, are not hybrids but simply different varieties of the same species. Nor should such birds be labelled as "splits." The latter term "split," or heterozygous, refers to genes in a hidden, recessive state, and does not apply when referring to a cross between a large exhibition bird (e.g. "English") and a smaller pet stock bird (e.g. "American").

If choosing to eventually breed for exhibition, it is wise to contact the specialty societies for breeders who can supply you with their culls, or "non-keepers," which they sell. Such birds may be quite suitable for beginners to breed and are often from good quality stock. For example, the culls from a Champion or Intermediate ABS (American Budgerigar Society) exhibitor may be superior quality to any stock you may find elsewhere.

Purchasers may check the birds' legbands as registered with ABS, which contain the following information: the Society initials "ABS," the year (e.g. 1993), the number bird bred that year (e.g. "105"), and the breeder's individual registered code (usually one or two numbers plus a letter, e.g. my code was "33R"). Usually the serious breeder of exhibition or line-bred birds will purchase traceable, seamless, closed legbands from the national society and such breeders may be traced back by their band code. Beginners now also have the option of purchasing bands either through the Society of Parrot Breeders and Exhibitors, or the American Federation of Aviculture, which may be good options when first trying one's hand at producing babies, or before banding for more serious competition at future Budgie specialty shows.

#### PART 2

#### **Colony vs. Cage Breeding**

Whichever method one chooses to breed Budgies, whether colony breeding or individual cage breeding one pair to a pen, it must be realized that Budgies, in their natural habitat, are by nature colony breeders. That is, they will generally not go to nest unless they are stimulated to breed through the sight and sound of other Budgies around them. Therefore, it is generally recommended that one starts out with at least a minimum of six birds, or three pairs, placed in such a manner so that they may all see and hear one another, or else additional birds may be required.

Colony breeding may be suitable if one is only interested in producing a quantity of Budgies, as opposed to concentrating on the quality of offspring produced. Special attention must be given to providing enough space for the flock so as to prevent frequent outbursts of aggression or fighting, and may, in fact, require close monitoring of behavior to catch trouble before a tragedy occurs.

It is best to set up an even number of pairs and remove any unmated birds by the start of egg laying, so that harmony in the colony can be maintained. Approximately one third extra nestboxes, to the number of pairs housed, should be provided to offer a choice to the occupants, and cut down on the number of arguments or territorial fighting by pairs who opt for the same nesting site. Otherwise, hens may fight to the death over specific nestboxes. In the colony breeding system, a careful monitoring of breeding activities is necessary and boxes must be taken down before pairs begin a

third clutch, otherwise breeding will go on endlessly, with chicks hatching approximately every 12 weeks, and pairs becoming quickly ill and exhausted.

Cage breeding, one pair of birds to a pen, is generally more recommended and is absolutely necessary if one wishes to know the exact pedigree or parentage of offspring; breed for very specific color mutations; or raise birds for exhibition. Generally, a pair is selected who are deemed appropriate mates by such traits as show quality, color, fertility, or other attributes, and are given a large enough cage which will permit the raising of a family.

While a commercial double breeder cage is acceptable, it should be noted the more space provided, the fewer problems will arise. Such incidents might include feather plucking or aggression due to over-crowdedness, or lack of exercise space for exhilarated wing-flapping. Homemade cages may be made and fanciers should consider that enough space is provided to accommodate not only the parents, but the number of youngsters produced who will eventually fledge and sleep outside the nestbox with their sire.

Individual cage breeding not only offers the advantage of accurate pedigrees, control over the production of color mutations, and ease of nest inspections and closed-banding of young, but also helps to cut down on fighting, aggression, or hostile takeover of nests, including the breaking of eggs or killing of young, which is a possibility in the colony system. On the negative side, individual cage breeding generally requires more time and effort to service each cage as opposed to just one communal flight. However, many fanciers feel the control over such factors as listed above justifies any extra time which may be required.

## Setting Up

Cages or pens can be built out of wire or commercially made enclosures can be secured. Flights should be built to accommodate the Budgies' ability to fly and play, and promote exercise to build muscle during the non-breeding period, and should be a *minimum* of six feet or more in length, preferably six to eight feet high to help build muscle and stamina when flying from the feed bowls on the ground to the top perches. Since Budgies are inclined to put on weight, the longer the flight, the better.

In the U.S. we tend to separate our sexes, keeping cocks in one flight with hens in a separate flight. In Europe and abroad, fanciers tend to fly the sexes together and do not seem to experience any trouble mating the pairs they select for the upcoming breeding season. By flying the sexes together, it is noted that the hens no longer remain sedentary as they would in a separate flight. Rather, the hens are moved and chased about by the interested cocks, and are therefore forced to exercise.

Once pairs have been selected, conditioning foods and soft mashes should be added to the diet, along with either a dish for bathing or daily spray misting. Such variables as increased food supply, proper temperature and humidity, along with extended daylight hours (which can be provided by using artificial lighting for indoor or basement breeding), plus the addition of a proper nesting site, e.g. nestbox, and an acceptable mate, will signal the onset of the breeding season.

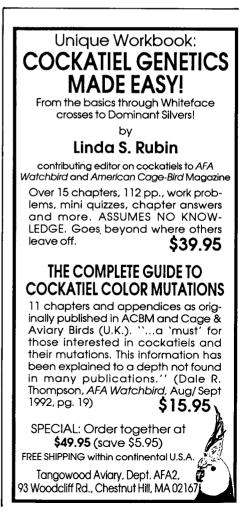
There are a number of Budgerigar nestboxes on the marker with the average box measuring 6" x 6" x 8", although there are bigger boxes available in different styles for the larger exhibition size birds. Most come with a nest concave block which will help the eggs stay safely together, and the addition of a handful or two of clean, white, pine shavings will be welcome by some hens and help to keep the nest clean and dry. Those pairs who are bothered by the pine shavings will remove them with no delay to their egg-laying schedule.

It is especially important that all perches, whether wooden dowels or fresh cut tree branches, are positioned firmly in the cage so that mating and copulation is successful, otherwise infertile eggs may result. Nestboxes positioned on the outside of a cage or pen will allow more room for birds to perch and breed. In colony breeding situations, birds may mate on top of nestboxes, if permitted access to them inside the breeding flight.

Hens selected for breeding should exhibit a deep tan to light brown cere indicating their coming into condition. By selecting a hen with a deep chocolate brown cere, she is already at the height of her breeding cycle, with no where to go but downhill, thus bringing the cycle to its conclusion. On the other hand, the hen with a tan to light brown cere should be closer to the beginning of her cycle with more time ahead to comfortably complete a second clutch.

Cocks should have deep blue to purple ceres, depending upon their color variety, and should be actively courting the hen by singing and rapidly tapping bright shiny objects such as cage bars, or nestboxes with their beaks. They should behave amorously, dilating their eyes, tapping the hen's beak with their own, eventually siding up to the hen to feed and mount her.

At the onset of the introduction of breeding pairs, a soft-food should be provided, one which pairs will rear their chicks on. In the wild, Budgies nest after the rainy season has stimulated the growth of seedling grasses, a natural soft-food. Providing a softfood will enable pairs to become familiar with the routine of eating such a preparation and should allow the



sire to feed his offspring more efficiently and quickly, without having to wait to predigest hard seed.

### Breeding

Within a day or two (sometimes within a few minutes in previously experienced pairs), the cock will begin to excavate the nestbox, by chewing the nest entrance hole and finally entering the box to make sure it is suitable and safe for the hen to enter. Shortly after, the hen will follow and will eventually remain inside overnight near the appearance of her first egg, while the cock stays perched outside at the nest entrance hole as sentry.

For this reason, some fanciers choose to block off the nest entrance hole until the cock has a chance to successfully mate with the hen to guarantee fertile eggs. Usually, it is safe to unblock the entrance within two or three days. Contrary to this, there are other fanciers who do not feel it is necessary to block off the nest or delay its attachment to the breeding cage, claiming high fertility rates make such an activity unnecessary.

Typically, a pair will start to lay within ten days of being set up to breed. Anywhere from four to ten eggs may be laid, with five or six being the average among pet stock, and perhaps two to six among the better exhibition quality birds, depending on the bloodlines. Eggs are laid approximately every other day and incubation is 18 days from when the hen first sits the eggs. It is usually the hen who incubates, although some devoted cocks may enter and sit with the hen on occasion.

Chicks hatch blind and naked and are rolled on their backs to be fed by their dam. Eyes open at approximately one week of age, which usually indicates the chick is ready to be banded, although some exhibition stock will need to be closed-banded much earlier as the size of their toes rapidly grows. At approximately ten days of age, the chicks start to pin feather. While the sire regurgitates food to the dam from outside the entrance hole for her to pass on to the young during the first two weeks, he will soon enter the nest to help feed the chicks directly.

Chicks start to fledge at about four to five weeks but require an additional two weeks to wean. It is the sire's job to teach the chicks what to eat and it is important that all new foods are now introduced to the chicks so that they will develop healthy eating habits. At this point, the cock is usually mating with the hen for a second clutch of eggs. Some of the chicks do return to the nestbox to sleep for a few more nights, but should be removed as soon as it is evident they are capable of eating on their own, and are able to fill their crop up for the night without soliciting food from their sire.

Generally, chicks may be removed from their parents by 38 to 42 days of age. If left with their parents much longer beyond this age, the parents may feather pluck or attack the first round of young as hormone levels rise, and they regard their older chicks as intruders, as their concerns switch to start a new round of young. Some Budgie fanciers prefer to use an older, dedicated, foster male to help acclimate the newly separated, weaned young to the nursery flight so they may be taught where the food and water vessels are located. Care must be taken that such a foster male does not try to attack, mate or bully young, as not all older males will be appropriate guardians suited for this role.

Should either the sire or dam feather pluck any of the young, the chicks may be removed to a second nestbox attached to the other side of the cage, and care should be taken to see that the sire continues to go in and feed. Usually plucking occurs when an over-anxious parent is interested in starting the next round of eggs. Once chicks are weaned and removed to a suitable nursery flight, soft-foods, along with the regular feed and water, should continue to be provided to ease the adjustment to a fully adult diet.

Budgerigars should never be allowed to breed more than two rounds of young, unless the rounds have been fostered out. However, the production of additional rounds of eggs will require extra calcium and appropriate supplementation must also be available. Generally, birds should be rested from four to six months, before being put up to breed again. This can easily be accomplished by breeding team A, while team B is resting, and while the fancier is preparing and conditioning team C for set-up, while team A is completing its breeding cycle.

## **Color Mutations**

Early naturalists on a number of occasions have reported seeing Yellow mutation Budgies flying wild in flocks of Light Greens. Sky Blues had also been sighted, and it was thought that the first Australian Opaline strain was developed from a wild-caught Opaline hen.<sup>5</sup>

Rogers states the first Yellows bred in captivity were raised during 1870 to 1875 in Europe, with Germany claiming the first breeding, while Dr. Vriends writes the first Yellows were bred about 1875 in Belgium.<sup>6</sup> Both authors agree that credit for the Sky Blue goes to Holland for a first breeding in the 1880's although it shortly died out, only to reappear some years later in Belgium.<sup>7</sup>

With dark factors already present in the green series birds, the appearance of blue now paved the way for six new variations to each future color mutation developed: e.g. Light Green, Dark Green and Olive Green; Sky Blue, Cobalt, and Mauve.<sup>8</sup> Such examples of later mutations affected included the character Grey (i.e. Light Grey, Medium Grey, and Dark Grey), Pastels, and others. In addition, new patterns and markings added a kaleidoscope of color to an already charming and colorful bird.

Today, there are hundreds of possible color mutations and patterns which may be predicted by reading up on the inheritance patterns of these mutations. The numerous varieties may be seen at shows, and variety certificates are usually issued to the winners of such colors and patterns. Without a doubt, out of all the members of the parrot family, it is *Melopsittacus undulatus* who can boast the greatest number of color mutations and patterns, and who is still going strong producing fascinating varieties, which we can hope, has no end in sight.

## Bibliography

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2. Idem. pp. 7 & 8.

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6. Vriends, Dr. Matthew, M., "The Complete Budgerigar," Howell Book House, Inc., New York, c. 1988, p. 26.

7. Rogers, C.H., "Budgerigars," John Gifford Ltd., London. c. 1975. p. 9.

8. Idem. pp. 9 & 10.