**HOW DO YOU CHOOSE ADDITIONS TO YOUR AVIARY?** from BILL STONE of Goodwood, South Australia

**I**n the culture of the exhibition budgerigar, the importance of careful selection cannot be too strongly emphasized, and, while no attempt is made to probe deeply into the science of genetics, some interpretation of the principles of systematic pedigree breeding is essential to promote the breeding of fine birds.
All fanciers who contemplate the serious culture of the exhibition budgerigar should exercise great care in the choice of birds intended to form the foundation of a stud. A pure pedigree budgerigar is one with a pure-line pedigree. Every strain differs genetically from every other pure strain, and budgerigars with pedigrees originally from several different sources are a very mixed bag indeed. While the birds may appear to be fine examples of the breed, their genetic characters are composed of such opposing factors that any attempt to found a pure strain from them would be a lengthy or impossible task to accomplish.

**A**bsolutely pure stock is essential to the serious breeder, and the popular supposition that any two fine budgerigars must automatically produce good stock is a fallacy, and much time and money can be expended by breeding on these lines. Briefly, a pure budgerigar is a bird from a strain or family of budgerigars where every individual is more or less related to every other bird in the stud. By breeding only best to best and ignoring relationship, and eliminating every specimen which fails to reach a high standard, each successive generation acquires the characteristics of the strain to a greater degree. Such birds are likely to progeny as good or better than themselves, because of the almost perfect blending of similar factors. They are termed "homogenous" (pre potent), and inbreeding is the only way to obtain this homogeneity, which would be destroyed by the introduction of different blood. Contrary to popular belief, inbreeding (or line breeding) is not harmful provided only healthy stock is used, and all the best points can be "doubled-up" by careful and selective matings.

**A**s inbreeding is recognized as the only method of building up a pure strain, it is necessary to explain why cross strain budgerigars are superior to the pure-bred. It must be appreciated that high class budgerigars are highly developed because of their purity of breeding. Each pure strain has a totally different genetical composition, and any attempt to blend them only results in upsetting the fine balance which has taken years to produce. It is a well known fact that to mate birds of different strains produces "hybrid vigour". Such offspring are usually more vigorous than their parents because of the diverse factors of the mixed blood. Unfortunately, this improvement of stamina ceases at this stage, and any further matings of the "hybrids" produces stock inferior to the original pair. This is what occurs when cross strain budgerigar breeding is practised, and little or no progress is made in the stud because the birds are not able to transmit quality to their progeny.

**I**nter-strain-bred stock is likely to be heterogeneous (a condition exactly opposite to the homogeneous pure bred), and this indicates the chief difference between the successful and the mediocre budgerigar breeder who breeds an occasional good specimen by chance rather than choice.
An out cross cock should never be used to a pure hen. Obviously, the cock should be pure bred, and bred from the same source as the hen, and the best cock to choose is the sire of winners, even in preference to the winners themselves. It is not sufficient to purchase a winning cock of uncertain origin. Far better results will be obtained from an ordinary pure cock obtained from the same strain as the breeding hen.
In conclusion, pure stock is rarely easy to obtain. The beginner invariably breeds indiscriminately, and so the breed deteriorates. Better breeding should be encouraged, and it is emphasized again that two or three genuine pure-bred pairs are far superior to any number of the usual cross strain- bred stock freely offered for sale.