

Rewarding Genes on the Show Bench

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Why are certain individuals so successful on the showbench year after year, while others are not? Are they just luckier than most or are they using a special technique, perhaps a set of principles, seemingly concealed as the elusive "secrets" of breeding for show?

Successful breeders of such popular species as budgerigars and canaries, have known for years how to create an exhibition line or breeding stud. When listening to accomplished breeders whose wins mount decade upon decade, many admit to paying their dues perhaps in a number of areas. Such realms may include the aviary, or birdroom, and the showbench certainly. And, some search through the written accomplishments of others' writing in the avicultural literature. But, perhaps most valuable of all, is the breeder's own studbook, which may contain a highly unique and undiscovered wealth of information.

True, there are those who may have an occasional win with a magnificently groomed, large parrot or well-conditioned finch. But, what about the *offspring* of those same individuals; why do they fall short by the same panel judges? After all, they were reared from an award winner! The reason may be a simple matter of breeding technique and the establishment of a family line.

As breeders of exhibition stock, livestock breeding offers us two choices. Do we want to produce offspring which retain the superior traits of the parents, which we have deemed valuable, or would we prefer to gamble with unrelated outcrosses, continually taking a chance on a game of genetic roulette?

There is only one way to guarantee the uniform resemblance of individuals and that is through selective breeding, including properly used line breeding, and inbreeding techniques, where appropriate. Certainly, the haphazard practice of inbreeding in general has led to disasters and should be discouraged. However, there is a major difference between careless inbreeding attempts by the uninformed, and *responsible linebreeding*, and breed-

ers should make every effort to learn the difference!

Many breeders do distinguish between inbreeding, i.e. the breeding of brother to sister, and perhaps half-brother to half-sister, and line breeding, i.e. the breeding of less closely related unions such as aunt to nephew, grandfather to granddaughter, cousin to cousin, etc. Some of the stricter adherents include father-daughter, mother-son matings, under the heading of inbreeding, rather than assign these unions to the line-breeding category.

While inbreeding is a desirable and useful tool to be used by the skilled aviculturist, it should not be haphazardly practiced by the less experienced beginner. Linebreeding, on the other hand, is an excellent and necessary method for forming an exhibition stud (i.e., a related strain or family lines which retain specific attributes, qualities and uniform family characteristics, recognizable as distinctive of a related line of birds).

Generally, the two alternatives to any type of livestock breeding include either the deliberate mating of unrelated individuals or, the *systematic* mating of relatives. Notice the emphasis on systematic which does *not* include a random choice of related partners! "That cock and that hen look good together and also happen to be related," is *not* an informed choice and will be unlikely to secure the physical attributes which will be needed. There must be a conscious awareness of the qualities to be set in the future line, and even a planned method of breeding.

In the first system of unrelated individuals, a wide divergence of type results, and from these diverse types perhaps a few exceptional individuals can be found. The emphasis, however, on mating unrelated stock is on the *divergence* of type. Such practices may be completely appropriate for undomesticated species such as parrots, finches and softbills, or threatened and endangered species. Here the goal is to assemble as large and divergent a gene pool as possible, to perhaps stock all a particular species' available genes in its future bank of survival.

However, when utilizing the rules of genetics for the showbench, divergence of type may no longer be necessary, nor even appropriate! This is why aviculturists have advised against buying from too many sources, however excellent they are. By using numerous individuals which

are *unrelated to each other*, you will only continue to breed dissimilar birds, losing the original qualities you are trying to fix as desirable characteristics in your exhibition lines. This can be equated with having too many parts in a jigsaw puzzle. Some may be useful, others not, and it takes that much longer to complete the puzzle, if ever.

Breeding a divergence of type, or unrelated birds, can be a necessary step in producing a few exceptional individuals on which to base a family line, thereby setting the stage for future linebreeding or inbreeding of related stock.

Simply put, one must first either produce some exceptional stock (or acquire some through purchase), on which to base a family line. This can be accomplished in one's own aviary by the breeding of unrelated individuals. However, the sustaining of such qualities, from generation to generation, will only then be accomplished through the future systematic breeding of relatives. Here, the object is to produce *uniformity* within the stud. And, it is here that show winners are consistently produced, decade upon decade.

In fact, there is a place for both systems in most breeding programs, but it lies with the skill and knowledge of the breeder to know which to employ, when, and how.

Indiscriminate matings to some extent, can and do occur naturally in the wild. However, purposeful selection is a primary ingredient to any system of linebreeding or inbreeding. It is otherwise impossible to create a true family strain, which is necessary in order to retain the uniformity and consistency of desirable qualities. It is not a "hit or miss" venture but requires responsible study on the breeder's part.

It is here that the breeder's own stud book comes in handy. The qualities of individual birds may be written down in the records and assessed. A formidable wealth of information, custom-tailored to one's own aviary and future breeding program, is there for the taking! Accurate record keeping, review and assessment of your *own* information will tell you what you need to know.

For example, in cockatiels such esteemed characteristics as size, substance, equal proportions, large cheek patches, full crest, etc. may be recorded. These qualities may be sought out when preparing to pair up birds for the breeding season.

Birds may then be caught up, caged, and examined. Should a pair show a negative disparity in the same characteristic, the union can be changed. One well-known principle as *never breeding two birds together with the same fault* (no matter how good the other qualities may be!), might immediately be recognized. In this instance, the birds should be repaired to other partners who do not carry the same fault.

In fact, ideally, pairs should first be assessed separately in show cages (for closer, more accurate inspection) or, at worst, in breeding pens. Should the pair prove compatible in characteristics or qualities the breeder wishes to fix or "set" in the line, breeding boxes can then be provided.

A good breeding plan, one which is preferably written down, allows the breeder to set concrete objectives. For example: "producing the desirable crest qualities of fullness and density, graduating filaments, and an ideal length of 2.75 inches, in over 50 percent of current breeding stock set up from lines A and B," may be set as the objectives of the 1992 breeding season. (Note: as the the ideal crest length is 3 inches, it may not be practical, or possible, to reach that objective in just one season. So, do not set objectives which are impossible to obtain and set your plan up for failure. Be patient, and realistic). Depending upon the stage the breeder is in, there may be more than one objective sought in the overall breeding plan, or different plans for different lines.

Such objectives, once stated in writing, can eventually be assessed at the end of the breeding season. This encourages feedback and review, allowing for improvements and a variable of control over the results of the season. After all, a good plan with clear objectives will ultimately allow the breeder to achieve stated goals, preventing wasted time or seasons of haphazard breeding. The sheer beauty of it is that no one else need know your progress, or setbacks, unless you choose to share this information.

There are numerous volumes written on avian husbandry, breeding for show, and responsible breeding techniques for readers to explore. Such topics as working with dominant traits, weeding out undesirable recessive traits, plus many other topics are covered elsewhere in considerably more detail. For breeders serious in

their endeavors, it is well worth the time to pursue such information.

At this point, I must also warn against the hazards of inbreeding. In general, I would definitely forego the breeding of brother to sister matings if at all possible. Brother to sister pairings are one of the best ways to encourage lethal genes and inferior quality, as well as outstanding characteristics. As inbreeding brings both good and poor qualities to the surface (observable in the phenotype), expect to find both.

A small amount of exceptional young may be produced, however, the practice of inbreeding should only be undertaken by the advanced breeder who knows what he's doing and why. One such example might include the pairing of an outstanding brother and sister of proven bloodlines, who are exceptional in a specific quality or qualities. Still, it is usually the more seasoned exhibitor who is experienced enough to recognize the strength, the uniqueness, or even the existence of such qualities.

It is better in the long run to be patient and use a sensible plan. Whether one is working with establishing a line of quality exhibition birds or simply raising young for the pet trade, it is always preferable to produce strong, sturdy stock. It is up to the breeder to seek out information and take the responsibility of creating a healthy stud in a responsible manner.

Certainly, closed banding and accurate record keeping are essential, and of top priority, not only to keep track of basic information, but to allow the breeder the advantage of keeping track of quality attributes, breeding histories, and other information which may encourage future progress on the showbench.

Even if a breeder chooses not to exhibit, it should provide satisfaction to know that the birds produced are of good enough quality to show successfully, should one eventually choose to do so. Quality begets quality, and whether a bird is intended for the showbench, the aviary, or simply as a pet, there is no reason not to attempt to produce the very best at every opportunity.

Many of the AFA national affiliated societies offer a genetics or breeding column by their consultants or successful breeders of their variety. Join these organizations and learn all you can from their literature. Study their written and pictorial Standard if they should have one, until it is embla-

zoned in your mind. Purchase the many books written on your favorite species and study them.

These societies usually have a show standard, written and approved by national board members, and a certified panel of judges, who very often themselves qualified through their own show wins and are recognized as the experts authorized to judge that variety. They are judging your entry according to the national standard to which they judge every other bird around the country.

A bird which is judged by a national standard, who consistently receives top bench placement by numerous panel judges, is rewarded beyond the material ribbons, trophies and championship title it receives. In essence, it is its genes which are being rewarded on the showbench! And, like all positive reinforcement, it will be this winning individual which the exhibitor will set up to breed the following season, in hope of passing on the same exceptional quality or qualities to future generations.

By breeding back to that winning individual and establishing a line based on specific attributes, a family line will eventually be formed where future offspring will pass on these desirable traits. It is these individuals then, and the fixed traits passed down to their progeny, which should continue to do well on the showbench in years to come.

It is important to fully understand the written Standard for those species with which we work. Judges place the individuals who most resemble the Standard with top points, again reinforcing their genes on the showbench, and the breeder will then go home to breed his show winners, in hope of re-capturing future wins the next show season.

Should the Standard change, such new values and traits will become part of the future breeding plan of the exhibitor. As each new generation of birds win, their genes will again be rewarded, becoming a part of next year's breeding program. Therefore, it is up to the breeder, and the national specialty society, to assemble a responsible standard which is in the best interest of the species, both in the present and, in the future.

References

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