

DEFECTS – DISQUALIFICATIONS & BREEDING PROGRAMS

By Bob Vaughn

Questions have been increasing about defects, disqualifications, or just odd characteristics popping up in young birds. I think it is worthwhile to have a discussion regarding out crossing or cross breeding, and line breeding or inbreeding as they may affect undesirable characteristics. I am not a geneticist so this will be in very brief general terms. There are many books available to research these in depth.

Line breeding is keeping the mating of birds within the same family with no unrelated birds introduced. This generally establishes consistent family traits and leads to uniformity in the offspring. This is an effective breeding method and is how an established breeder develops their own unique strain. However, care must be taken to avoid the affects of inbreeding.

Inbreeding would be continued mating of very closely related birds such as brother and sister. Continued use of inbreeding will soon cause problems with fertility, hatchability and overall vitality. The only good way to correct these problems is by out crossing with unrelated birds.

Out crossing or cross breeding is the purchasing and mating of unrelated birds, or introducing an unrelated bird into an existing flock. This may enhance vitality, fertility, hatchability, etc and is an effective breeding practice. Many good birds have come from out cross matings, but the down side is that the offspring of the cross are usually more inconsistent in desirable breed traits and often there is a higher percentage of defects that pop up. In Jersey Giants, some of the more common problems to watch for are stubs between the toes or up the sides of the leg, side sprigs on the comb, split wings, weak wings that hang low especially on roosters, twisted wing or other feathers, crooked toes, light eye color, off colored feathers especially in the hackle, and purple barring of feathers usually in the tail or shoulder of the wing.

This doesn't mean that out crossing is bad. It does mean that when raising birds from out crosses, you need to recognize what you are dealing with. What you end up with in chicks raised from outcrosses is much more unpredictable than with line bred birds. Sometime an outcross may "click" just right and provide some great offspring. However, it is not at all out of the ordinary to have a reasonably high percent of culls at times and you need to be prepared to cull closely and dispose of any unsatisfactory birds.

Be sure to mark the offspring of an outcross very clearly. A number of years after we had started off with Giants from Golda Miller and maintained a closed line bred flock, we decided to try an outcross. Mrs. Miller wanted to try the same and since the flocks were related, with no outside birds introduced to either flock, but the birds several generations removed we traded birds for an outcross. The parent stock was all top quality. I don't remember all the issues, but it did not "click" on our side and the offspring had more problems than we wanted to deal with, so we disposed of all the offspring of this outcross and went another direction within our own flock.

It can be tempting when only a few birds are raised to hang on to a bird that shows a severe defect when it is otherwise a good bird. In the long run though this will only result in strengthening an undesirable trait that may keep popping up and take several generations and frustration to eliminate later on. Often, people buy and mix good solid breeding stock from two or more breeders and then are disappointed when the off spring don't combine all the best traits of both lines. This should not be a poor reflection on either of the parent lines. It's kind of like the lottery and the odds are that a fair amount of close culling will need to be done.

So, the upshot of all this is that when out crossing, go into it with the idea of having to cull a lot of birds the first couple of years and if you don't have to, consider it a pleasant surprise. If an outcross "clicks" consider yourself lucky. If it is a complete bust, dispose of everything and start over. Usually you land somewhere in between with a mixture of young birds to work with and just will need to watch them carefully and cull closely.

Many successful breeders use a basic program of line breeding to help maintain desirable characteristics, with a carefully monitored occasional outcross to maintain vitality.