

The Self Black - Pearl of the Cavy World

By Bryan Mayoh

A SELF BLACK Cavy, Mr. Whitworth's Champion Sweep, was first exhibited in public at Crystal Palace in 1889. Immediately, the potential for developing a jet-black animal excelling in shape and lustrous colour captured the imagination of the Cavy Fancy. Within a short period of time, Self Blacks became the most popular breed of cavy, a position they have retained to this day.

The standard for all Self cavies was originally developed for the Self Black over 60 years ago. In a booklet written in 1926 by a former editor of FUR & FEATHER, Mr. Allan Watson, it was already stated that 'Self Blacks approach the standard of perfection more closely than any other breed of cavy'.

Those who feel that such a statement leaves little challenge to the breeder should note that the photograph of a Self Black in this 1926 booklet shows an animal considerably inferior to present-day specimens on shape of head and on ear carriage. The breeder will always find some point to improve, while struggling to resist Nature's efforts to undo improvements which he has made in the past.

Since 1926 Self Blacks continue to be widely regarded as the breed most approaching the standard of perfection. Certainly, Self Blacks consistently gain more Best in Show awards than any other variety.

Nonetheless, these successes are not easily gained. No other breed of cavy receives the rigorous examination for coloured hairs to which the Black is subjected. With no other variety will you have to beat 20 or more cavies just to win your breed class at a top show. With no other breed will you have so many keen rivals, many of whom have proved their ability to succeed with their stock.

So now we have glimpsed the three major components of the fascination of the Self Black: its beauty, which allows it to come near to the standard of perfection drawn up for all Self cavies; the possibilities of considerable show success engendered by this quality; and the intense and usually friendly rivalry with a considerable number of determined fanciers, such as to make a breed class win at most large shows a major achievement.

In this article I shall discuss the showing and breeding characteristics of the Self Black, both in my own experience and as related to me by such outstanding breeders of the Black as Graham Phillips and Arthur Robinson. In so doing I hope that those unfamiliar with the breed will learn something of its fascination for the specialist breeder, and that the latter will enjoy comparing experience and opinions.

APPEARANCE

The overall appearance of the Self Black is of prime importance, shape, eyes and ears accounting for 45 points of the Standard. More than any other variety of cavy the Self Black excels on shape. The profile starts with a hook nose rising over a rounded skull up to the hump formed by powerful shoulders, and then dips to the small of the back levelling briefly before once more curving, over the hindquarters.

The skull should be broad with great width between the eyes and ears; and the muzzle should be full and rounded off, rather than tapering to a point and snipy. Typically boars differ from sows in having a less-pronounced curve to the head when viewed in profile, although this should be compensated by a greater width of head.

In both sexes eyes should be bold and appealing, rather than small and sunken or excessively prominent and staring. Ears should be large and well drooped, with a gentle curve as in a single rose petal, and should not be set too high on the head.

In addition to all these features which, individually, are not always easy to attain, the top-class Black must also have 'expression' or 'glamour', an elusive quality dependent upon these features being present in such proportions that the whole animal is a balanced entity, and upon the cavy's ability to 'show-off' its assets.

An essential of glamour in the Self Black is that when you view the frontal of such a Black the dark shading formed by the curve of its head should give the impression of a smut, as in a Himalayan, covering the nose and extending up between the eyes. Another 'must' is that the width between the eyes should approximate to the distance from the tip of the nose to an imaginary line linking the eyes.

It has often been written that when any Self is viewed from above it should have the shape of a brick with the corners rounded off, there being no tendency to a baggy or pear-shaped appearance, but with evident width across the shoulders.

Vital to the appearance of the Self Black, as with all show cavies, is condition, which although allowed only ten points in the Standard actually plays a major part in determining the judge's assessment of the type of the cavy. A good Black which is down in condition can appear narrow and snipy on frontal, flat and boney on shoulders and ragged in coat. Plenty of firm flesh and substance, without approaching obesity, is the aim.

Of the features described above I would say that no other breed of cavy approaches the Black on shape of head and shoulder and on 'glamour'. Self Whites are frequently bigger pigs of excellent substance, and can have short broad heads and very bold eyes; but ear carnage and profile are major drawbacks on most seen today. Of the other Self breeds Creams and Golden come closest. Both can show good size and shape of shoulder but though the best of each breed can compete on type, particularly the broader-headed Creams, both are vulnerable on evenness of top colour and depth of undercolour.

In order for the Self Black to retain its pre-eminence among the Self Fancy, constant vigilance is needed both on the show bench and in the breeding pen. Blacks can easily fail on any of the characteristics for which the paragons of the breed are noted, i.e. on narrowness of skull, flatness of forehead, snipyness of muzzle, lack of substance on shoulder.

Such animals should not be put up in duplicate classes simply because they are Black, when there may well be better representatives of other colours, and to use them as 'breeding stock' in the hope of improvement next time is to court deterioration of the stud.

Amongst other insidious faults which occur in Blacks, four affecting eyes, ears, coat and physique are worthy of mention.

'Fatty' or 'red' eye 'fatty eye' consists of unsightly deposits of white fatty tissue around the underside of the eye, which frequently cause the lower rim of the eye to droop. In 'red eye' red gelatinous tissue around the eye appears to swell, sometimes showing above the surface, thus spoiling the appearance of the cavy for exhibition.

Fatty eye is perhaps less common in Blacks than in Whites and Creams. The fault is undoubtedly hereditary, and ideally no animal that develops a fatty eye should be used for breeding. Of course, fatty eye only develops in most cases when the cavy

is adult and it may already have offspring, so the use of breeding records can be invaluable in limiting the affliction.

'Red eye' is less harshly viewed by most fanciers, perhaps because it is not certain that this condition is hereditary. Injury or infection may be possible causes, although my experience is that the condition is most likely to be seen when pigs have put on plenty of weight and are in full show condition. With care, the red swelling can be punctured by tweezers and the swelling subsides.

Ear faults - the occurrence of creases or 'hems' in the ears is rarer in Blacks than Whites, Creams or Goldens. More common are 'cocked' ears, which do not always respond to teasing down. Often ears are too small, which can only represent a breeding fault to be avoided or rectified in the choice of mating.

Coat flicks - some Selves have a tendency for the hair around their eyes to show a slight flick. This is particularly noticeable in young stock, but is often undetectable later. However, some cavies have pronounced flicks which give a rough appearance which must be undesirable in a smooth cavy. Similarly, swirls from behind the front legs to the side of the cavy are a breeding fault to be selected against.

Crooked legs - a disposition for some new-born to have one or two crooked forelegs, so that the cavy supports its weight on the outside of the foot rather than the sole, seems to be endemic in certain strains. I have certainly had a number of occurrences of this problem, which seems to arise from a combination of hereditary and environmental factors, as evidenced by the facts that it has occurred only in Blacks and not in Goldens and that the problem reduces dramatically in frequency with feeding of summer grass. Once the cavy begins to support its weight and walk on the outside of the foot, the deformity worsens, so that unless the condition clears in one or two days I invariably cull the victim. Selection in this way reduced the occurrence of fault significantly in my stud over a period of several years, so it is now rare.

Colour - Colour carries 30 points in all Selves, and in Blacks should be a lustrous, glossy, raven-black, and carried down to the skin and without interspersed white or red hairs. The failings known to most judges are that undercolour tends to fade on the flanks and shoulders to show a slaty hue, and that red or white hairs can be found sprinkled on most parts of the body (not, one hopes, on the same pig) - cheeks and vent being particularly vulnerable. Often this knowledge stimulates a frantic search by the judge aimed at finding faults rather than assessing quality; although in recent years searches for white mite have replaced hunts for red hairs as the priority for the judge who doesn't know what else to look for.

The silly thing about such searches is that frequently a more obvious failing is thereby ignored, relating to the first feature of colour mentioned above - top colour to be lustrous and glossy, showing a coat rich in natural oils, sometimes referred to as the 'finish' of the pig. If you look at a class of Blacks you should note distinct differences in the sheen of their coats, so that some appear 'blacker' than their dull coated rivals. Others will show unevenness in top colour indicating over grooming. These points should not be overlooked in judging.

In old publications I have seen it written that a good Black should have a 'beetle-green' hue to the top colour. Although my poetic vision is not sufficiently developed for me to visualise a green tinge to any Self Black I have yet seen, this description does illustrate the importance of the lustrous sheen to the coat. The best typed Black in the world cannot catch the eye quite so much if its coat is dull and greyish.

As to breeding principles, undercolour certainly must be sought on the basis of using at least one parent sound in the feature in each mating. Only on the basis of sound undercolour can correct conditioning and preparation of the cavy produce the desired finish to the top colour.

The assessment of undercolour is not as easy as one may think, lighting conditions having a major effect on the apparent depth of colour. I find that the best way to assess colour in my own pigs is to choose a day when the sun is out but to judge the pigs in a bright but not direct sunlight, going through the whole stud to affect comparisons.

The subject of red and white hairs is of constant importance to Black breeders, as a profusion of either turns more show pigs into breeders or pets than anything else. Some clusters of white hairs which appear later in life can be due to fighting and are of no significance for breeding. However, I have not yet met a fancier who has suggested that an abundance of white hairs which have developed naturally is other than a significant weakness in the breeding pen.

Red hairs have traditionally been regarded rather differently, though not by all fanciers. Basically, the various theories are that:

- i) Red hairs are endemic in the Self Black. You'll always get some pigs with many red hairs and some with few, so don't worry too much about it.
- ii) Red hairs, particularly patches, provide good undercolour and are invaluable in a breeding sow. However, do not make widespread use of boars with red hairs, or the feature will become established in most of your produce.
- iii) What goes in must come out. If you breed from stock with red hairs you will breed offspring with red hairs.

I know of proponents of each of these theories among the best breeders of Blacks of the past 25 years, although the last two are the most often quoted.

Graham Phillips once had a sow with a red leg that produced hardly anything but winners, and, although he does successfully employ his show stock in the breeding pen, Graham will use sows with red patches. The grandmother of my own NCC Double Champion Burlequin Belfemme had a red blaze on her face.

Pat Hutchinson and Elizabeth Wilson, who were highly successful with Blacks produced most of their best exhibits from showable stock and were not, I believe subscribers to the red helps undercolour theory.

My experience with Blacks of Phillips' origins has been that red hairs crop up regularly but fairly unpredictably; and probably any attempt to breed out the tendency would throw away many of the best features along with the red hairs, such intense selection for colour being required. Even then it might not succeed! I do tend to be careful not to use a boar with too many red hairs in breeding plans, on the basis that if he can be shown he's ok, if not he's to be used only with great care. Sows with excessive red hairs, and thus unshowable, would be kept only if they have otherwise sound features and come from parents of good colour. The sow with the red blaze was kept because her mother was BIS in the Bradford Championship Show.

With this policy you get some pigs with very few red hairs, some showable but with a few more, some with a definite amount of brindling and thus unshowable, and a few with red patches. The uncertainties of breeding are demonstrated by two matings when I took a risk, mating my best boar, Finrod Felagund, who was of excellent type but had a number of red hairs (the second category mentioned

above) to a sow with a red patch on her rump, this one from a brilliant mother who had won BIS in the NCC YSS and Scottish National Championship Show.

The first litter had two pigs with patches and three with considerable amounts of brindling, a useless result. I don't know why I was so silly, but I repeated the mating, promptly breeding NCC Champion Samantha Spade, who had very few red hairs and gained five good Best in Show awards.

White hairs I have come across more rarely, although on odd occasions when I have experimented with another strain they have been a real problem. However, three babies of my own strain have appeared to be genetical freaks, being born all Black but developing a light Roaning effect from a profusion of white hairs at four weeks. I have heard of other breeders having this crop up occasionally. I don't know if the effect is passed onto offspring, as mine were given away as pets, one to Jesus.

Coat - for all Selves the coat of a Self Black should be short and silky, of even length all over the body and free from long guard hairs. In addition, as has been stressed earlier, the coat should be glossy so as to give a lustrous appearance to the top colour.

Few Self Blacks appear to have naturally short coats, so that careful attention must be paid to grooming. It is easy to over groom a pig, particularly after one prepared for show has been given a rest and the coat begins to moult. This is easily detectable in the appearance of a dull patch on the top coat. In addition many Blacks, especially the boars, seem to have greasy coats, and the existence of 'white mite' on the coat is only too easily seen, so that bathing before a show is a 'must'. The difficulty of preparing adult boars is easily detected on the show bench, very few being put down with short coats free from grease.

These factors render know-how in show preparation an essential for success. Some fanciers pick up this know-how very quickly, some over the years and some never; but all contemplating keeping Blacks should bear in mind that some dedication to preparation is essential, as a lot of determined people are always out to beat you.

Selection of Stock

Selection of which stock to keep and which to sell is essential to the establishment of a sound stud. It is often said that a top-class Black can be spotted at birth by the width and shape of its head. Certainly, when you have a healthy youngster with a broad head of good shape, bold eyes, large well-shaped ears and no obvious red hairs, you can be hopeful. However, the new-born appearance is not infallible. Single young often look particularly impressive because of their size, but, frequently, less spectacular youngsters from larger litters, who have all the attributes in the right proportions, turn out just as well or better.

It is important in assessing youngsters to know how their parents and grandparents developed, or at least what are the characteristics of the strain. At times, when I have tried experiments with Blacks of an unfamiliar strain, I have been pleased with the appearance of the babies, only to find that they have not developed in frontal and shape of head in the same way as I would have expected.

As to experience with 'spectacular' babies, I used to become excited about world-beaters of the future. A couple actually turned out top-class, but enough backward youngsters have turned out well and 'flyers' badly for me to be satisfied if the pig is well proportioned, with good ears, and free from colour faults as a baby.

However a baby looks at birth, growth unusually involves its passing through plain phases when the proportions are wrong and the pig appears gawky. At times the

ears are held high and you have to tease them down. Look hard and use your imagination to see the future champion.

One youngster I bred, which was promising at birth, still had ears erect and very little size at two months. Remembering her pedigree I kept her, and at five months 'Chica Chubb' won the ESCC YSS and later became a good show and breeding sow, of excellent substance with large, well drooped ears.

So, if in doubt, I rely on pedigree but, like everyone else, have seen a few ugly ducklings get away and become swans.

Development of Stock

Very few young Blacks are sufficiently developed to compete in the top class before they are three months of age, and most need to be four months before they reach their full potential as young stock.

In winter a month might be added to these figures even when plenty of greens and good hay are available. The ideal weight for showing a young Black I find to be between 27 and 28 oz, although you can occasionally win in top competition with pigs 2 to 3 oz smaller if they are really glamorous babies. At around 30 oz the dangers of the pig's being sent off as 'Over Developed' increase, to near certainty at 32 oz. The lowest weight at which I have had a pig OD'd is 27 oz, the highest at which I have not is 34 oz, and wouldn't try that again.

The most important factor in knowing when a young Black is ready to show is that in appearance it should resemble a mini-adult: cobby, well-proportioned and with plenty of condition, rather than rangey and needing to fill out. Some pigs may never gain this appearance as u/5's but may, nonetheless, become good adults with plenty of substance.

I mate all stock, including show pigs, at between five and eight months, dependent on size, time of year, show needs and the availability of suitable boars; and try to avoid the winter months for producing the majority of litters.

After littering for the first time, sows usually need three months to recover and build up substance. Exceptionally I have won with sows two months after littering, although some sows remain too baggy and boney-shouldered in shape to be shown after producing a litter. All of my best adult show sows have had litters and some of them have had two, before being built up to show condition.

Opinions vary as to when boars should first be used for breeding. In old publications I have seen it written that they should be seven to eight months old, but on occasions I have followed Graham Phillips example in using boars at three months, to a single sow, without adverse effect on the stamina of either the boar or his offspring. I have not found that boars lose lots of condition when in the breeding pen, perhaps 2 to 3 oz at most, so that comments that this is the case may be due to the tendency of the breeder to feed a pen of a boar and three sows with rather less per pig than a pen of a single boar.

Intermediates generally need to weigh between 32 and 36 oz to appear of appropriate size for showing. Adults should be at least 40 oz, and I have had my best results with animals 3 - 6 oz heavier than this. Again, though, some strains produce larger-boned animals, which need to achieve greater weight; and a long body or a banjo-shaped appearance, are not to be desired whatever the weight achieved.

My experience with adults is that they usually have to be twelve months of age before they can be shown with success, although some pigs show exceptional

growth and can win before this. My adults peak at 15-21 months, becoming rather more delicate in coat and condition at the top end of this scale and definitely 'past it' by twenty-four months. However, again, different strains vary dramatically, and some people have had good results with Blacks well over two years of age.

Due to their better shape of head and softer coat, sows are generally a better bet as show pigs than boars. Adult boars can be very greasy, and thus require a great deal of expertise to show properly. However, once the effort is made the boar may be able to overcome the sows on size and on width of frontal. This is particularly possible if there are separate classes for the sexes when the winning boar, having been judged against his own sex, can often defeat the best sow. In a mixed class some judges, particularly those who are not Self breeders, discard the boars without considering their special merits. However, if a boar is to be employed in the breeding pen, the risk of stress in showing him must be considered, and if he becomes upset while being prepared he is best left at home.

Breeding from a Strain

The importance of using a strain in livestock breeding, particularly where the aim is to concentrate on external features such as colour and shape for exhibition purposes, is a point upon which both pragmatic breeders and geneticists are generally agreed. The basic idea is to carry out breeding operations within a small pool of related individuals. Close inbreeding (typically father to daughter) may at times be carried out, but even when this is not the case the animals being paired will share a considerable number of common ancestors within a few generations.

Such inbreeding, whether intense or fairly moderate, tends to promote consistency in features. This is reinforced by the breeder's selection of which boar should be mated to which sow and which offspring to keep for future breeding operations, so that over several generations the products of a stud may show certain characteristics so consistently that the expert may recognise their origins from their appearance. When a stud consistently produces those features needed for success it is clearly at a major advantage. This is where the use of a strain is important. Such a strain takes generations of in-breeding and selection to produce. You do not make a strain in a single generation by mixing stock from different sources: unless the sources are themselves related you will produce only a 'strain' of mongrels.

Strains of Self Black Cavies

Every Self Black produced by my stud traces originally to five pigs bred by Graham Phillips in 1974. Since then the only major 'outcrosses' have been to stock brought in from the same source, which nowadays is likely to contain descendents of some of my own pigs. On rare occasions I have also re-introduced lines of my own stock passed on to other fanciers and developed for a few generations by them, with successful results with stock from K & S Charlton and D Barry. Since the original stock inbreeding has been carried out to a number of the best products of the stud, so that looking through the pedigrees of any Mayflake Self Black you would find repeated occurrences of the names of the same outstanding pigs of past years.

Because, obviously, my selection rather than Graham Phillips' has been applied to mating and retention decisions, based upon slightly different intuitions and ideas, a definite sub-strain of the original one has now evolved. It must have been in exactly this manner that Graham gradually refined his own strain from stock which all originated from Arthur Robinson nearly forty years ago.

Unlike his successors who have taken up the strain and worked within it, Arthur Robinson actually 'made' his own strain from different sources. He had been developing Blacks as a sideline to Creams when, in search of better type, he was able to buy from Eric Brooks a young boar. This had been produced from the stock of the late Alf Foster, 'the Cavy King' of Bingley. Given a choice of two, Arthur, according to Brooks, picked the wrong one. However, this boar did the requisite job of improving type.

A little later, Arthur wanted to get a bolder eye on his pigs, so he approached a prominent Black fancier named Charlie Naylor. He was given a choice of 20 or so boars. Overfaced by the choice after looking and looking and looking, Arthur picked one at random. 'Tha's picked t' worst 'un, lad" said Charlie. "Well it'll 'ave to do" said Arthur, and once more the boar did very well indeed, stamping a far better eye on his stock than he carried himself.

After Graham Phillips had taken over his stud of Blacks, Arthur started again with a single sow from the same Charlie Naylor and a boar from his old stud. A new stud was built up, and later these too went to Bonegate. So the origins of the stud Graham Phillips developed came through Arthur Robinson from Charlie Naylor and Alf Foster.

The evolution of the Robinson-Phillips line of Blacks continues. Numerous fanciers are successfully developing studs from stock originating from Bonegate and Mayflake; whilst Noreen and Peter Handley have kept three sub-strains, quite separately, within one stud. They have a line developed from Phillips stock, one coming from Mayflake origins (via Darren Taylor) and some pigs descended from the stock of Arthur Robinson.

Evolution of modern strains of self blacks

1920s - 1940s	Foster	Naylor	ANO
1940s - 1950s	Robinson (new strain)		
1950s - today	Phillips		
1970s - today	Mayoh	Handley	

Based on results over the past fifteen years the Phillips, Mayoh and Handley studs of Blacks have been easily the most successful. At the most important shows (Bradford, London, N.C.C. Stock, E.S.C.C. Stock) in the period 1975 - 1992 over half of the 350 Self Black breed classes have been won by these three studs alone. In addition many of the other successes at these and other shows have been gained by fanciers with stock originating, at least in part, from Phillips and Mayoh sources, viz: Bebbington, Pike, Deadman, Taylor, O'Neill, Redmore, Boothby, Cooper, Charlton, Barry, Padfield, Berry, Booth, Kei-Mau Stud, Rivendell Stud, Hall, Francis, Blight, Gammie & Xanadu Stud.

This is a very different situation to that pertaining in the late 1960's and early 1970's. At this time the tremendously powerful strain originated by Elizabeth Wilson was in its element, producing a string of major successes. Miss Wilson had a highly methodical approach to breeding, and significant amongst her methods was a belief in using the best show pigs in the breeding pen.

Also in the late 1960's Pat Hutchinson came to the fore, and she took animals of predominantly Wilson origins and added a touch of Phillips to produce yet another distinctly recognisable strain - this one having adult size and substance to the slight expense of glamour, to gain many big wins with adult stock.

Other discrete strains of Self Blacks to be very prominent were those of D. Hill, V. Bailey, P. Parkinson, Cook Stud and J. Radeaglia, the latter's coming directly from Mrs Plant of Grimsby, a leading pre-war breeder. Of these the only ones still around are those of Vic Bailey, in the hands of both himself and Pauline Avery - (although I believe that a cross to Phillips-blood has been carried out here too); and Cook Stud.

This reduction in the number of distinct strains causes the Blacks of today to be a far more uniform bunch than a few years ago. The common source of the leading studs is easy to detect. It requires a considerable familiarity with the characteristics of each stud to differentiate their produce. Even then there is an overlap in the type of animal produced, such that some cavies from different studs would appear almost identical. However, over several generations a strain can change considerably, and it is to be expected that the output of present day strains will diverge further in the future. It is also entirely possible for an essentially new strain to be produced by intermixing several of the Phillips sub-strains (which is what Cathy Francis is trying to do) or by blending one of these with residual stock from the strains of 15 years ago (as K. & S. Charlton succeeded in doing), to be capable of mounting a serious challenge.

The Results of Using a Strain

The effects of protracted inbreeding, such as is carried out in a closed strain, is to reduce variety and increase consistency, due to the increased numbers of genes which are 'doubled up'. However, though this means that any good feature which is established is more likely to recur, it also means that less desirable characteristics are likely to be seen. This is because many bad features are caused by recessive genes, and only show themselves when such genes 'double up', under the influence of inbreeding. It is important, therefore, to monitor that such features do not constantly increase as the strain is built up along with the good points you require.

The keeping of records is a useful aid to this. With records you can readily see what level of faults are cropping up; is viability reducing?, are certain types of mating more regularly causing faults to appear or more consistently producing the type of offspring you seek? For all the time I have kept cavies I have also kept records.

Actual Breeding Results

Having referenced these records, a process aided by their being kept on a microcomputer, I shall discuss in particular detail what might be the results expected from my strain of Self Blacks and which matings seem to produce the best and worst results. Before going into detail, though, some comments on the problems encountered in breeding Self Blacks are appropriate.

1. Early Deaths:

I have always recorded incidences of stillbirths or early deaths amongst babies. The loss rate is considerable an average of 30% stillborn and 10% died young, with a best ever figure of 20% stillborn.

This result may arise due to inbreeding or management methods or both. My prime concern is that, as the strain continues, there should be no tendency to an increase.

Worst results have been in winter, where cold and shortage of green food are the likely causes.

2. Physical Deformity:

Throughout my experience with this strain of Blacks there has been an incidence of pigs born with crooked legs. Though there may well be an environmental contribution (in terms of the mineral content of foodstuffs for example), a genetic predisposition seems inescapable, for this defect has never occurred in any other breeds which I have kept. Accordingly, I have never risked breeding from a pig with this fault (it is an eyesore anyway) and all so affected are culled. Over the years the problem has reduced gradually, after being very severe when I first started, but the incidence has never disappeared. Interestingly, boars have been more afflicted than sows, with 9% being so affected as against 4%. The average overall is 6%.

3. Excess Red Hairs:

Far more than most other Selves the Self Black is bedevilled by a tendency to produce odd-coloured hairs scattered on the body. Every Black I have ever bred has had some. The numbers of red hairs may vary from a few isolated ones through a frequently-encountered peppering on the cheeks to brindling or even patches on the head or legs. A general rule is that if you can't see red without turning back the coat of the cavy, then with enough patience it can be prepared for showing. Given an endemic fault like this it is clearly of real interest to see the extent to which excess red hairs crop up.

The most obvious measure of the 'red-hairs failing' are those animals which can immediately be ruled as non-showable on grounds of colour. Over the years the percentage of such pigs has averaged 23%, with a yearly high of 30% and a low of 15%.

Whilst, as mentioned before, most cases of crooked legs have occurred in boars, it is the sows who have been more prone to red hairs (30% as against 15%). For generations the practice of many Self Black breeders, including Arthur Robinson and Graham Phillips as well as myself, has been to consider red-haired sows for breeding but usually not boars (because of his greater number of offspring you are far more likely to inbreed to him later), and this may be a factor.

4. Other Problems:

As to other obvious problems which can arise: - White hairs occur less often than red, and in my experience frequently they come only after the skin has been damaged by fighting. They also appear to be more common in older pigs. Undercolour has always to be watched, but this I find very susceptible to subjective judgements as well as to lighting conditions. My records are not sufficiently good to let me analyse this factor but I do believe it to be hereditary, and select stock accordingly. Hems in ears are extremely rare in the strain. Only three pigs have ever been born with one. Fatty eye is also rare. One of my foundation boars developed this fault. Several generations later came the next occurrence, in a very good show boar, who had already been used at stud, at less than 24 months of age; and a further example occurred in a similarly talented great grandson. Luckily, I have not seen it since. The tendency of pigs to show 'red in eye', whilst a little more common, has also not been a major problem, especially since simple surgery will cure the fault.

However, the major reason why most pigs do not have the show class required is not red hairs or any of these very obvious faults; it is simply that they aren't up to the necessary type. Their ears may be a little too small or high set, or the head may be too narrow between the eyes or insufficiently rounded on muzzle, so that showing in all but moderate opposition would be a waste of time. In poor

competition pigs with moderate type but no obvious other faults have frequently won, but I would not regard them as show pigs.

When looking at type it is the overall balance and all round glamour or expression of the pig that matters more than the sum of individual points for head, eyes, ears etc., and I think it best to carry out further analyses not in terms of trying to dissect type faults but as to how many pigs had the overall qualities to be good show specimens.

5. Percentage of Showable Offspring

I grade each pig at 5 months and adult, indicating its overall show potential. Grading ranges through:

- 1/ Outstanding, Championship or Stock Show win potential, no significant faults.
- 2/ Outstanding, Championship or Stock Show win potential, but faults requiring care in show preparation.
- 3/ Good, Championship or Stock Show Place potential. Would win good pen shows.
- 4/ Good, Definite Show win potential, but not expected to compete at Championship or Stock Show level.
- 5/ Fair, can be shown, but only able to win in limited competition.
- 6/ Fair, some definite weakness of type, sound on colour.
- 7/ Too many coloured hairs for showing.
- 8/ Too many coloured hairs and definite type failings.

For the purpose of analysing results I have summarised these as:

- | | |
|----------------------|-----|
| 1 - 2 - Outstanding | (O) |
| 3 - 4 - Good | (G) |
| 5 - 6 - Fair | (F) |
| 7 - 8 - Fails Colour | (C) |

The Outstanding and Good categories constitute what I would define as 'Show Pigs'. Although some of the animals in the Fair category are capable of winning. I am not really interested in stock whose wins would be largely due to lack of opposition. The Class 4 Goods are quite satisfactory in that when they are built up they can compete well in good competition, especially as adults. The differences between classes are of course blurred rather than sharp, so that a Class 3 can and frequently does beat a Class 1/2 on its merits 'on the day', even though its intrinsic qualities are inferior.

Ideally something less arbitrary than personal opinion would be best to indicate the results of a breeding programme. However, the obvious alternative is to use Show Results, which I think even less well reflect reality because the pigs being assessed are not all afforded equal opportunities. This may be due to pigs being born at the wrong time for u/5m showing in the major events and then kept for breeding; pigs being produced in years when I had less time or inclination to go to shows at all; or pigs unfortunate enough to reach the major competition of their lives and be faced by an incompetent judge.

In support of the use of my own opinion I can at least say that the test is fairly strict, for several Stock and Championship Show winners were only rated as 3's. Furthermore, the total of pigs rated as Outstanding over the period of the analysis,

including several who were never shown at all because of their value to breeding operations, is 53. In the same timescale over 60 pigs won Championship or Stock Show classes, or took awards of Best in Show at major (Semi-Championship) events. In any event the mere continuation of a stud's ability to compete effectively means that the breeder must have a reasonable idea of the merits of his stock.

So given that we accept my semi-validated opinions, what percentage of show stock can we expect with this strain?

Looking at what might be a typical year's breeding results we can see what happens. Let's assume 100 pigs are initially produced. Then:

Initial Produce	100		
Stillborn (33%)	30		
Died Young (8%)	10		
Live	60		
Boars	30	Sows	30
Crooked legs	3		2
Fails Colour	5		9
Fails type	13		10
Show Boars	9	Show Sows	9
Good	7	Good	7
Outstanding	2	Outstanding	2

6. Origins of Show Pigs

So far we have established that a reasonable proportion of show pigs are produced, with an outstanding one coming in every fifteen live babies. Of course, though, there is more to it than pairing up pigs at random, counting to 14, then Bingo! It is highly relevant to see if any mating patterns produce the goods, or the garbage, more consistently than others.

For this purpose I have classified the matings I have used as follows:

- O - O: Two Parents Outstanding
- O - G: One Parent Outstanding, One Good
- G - G: Two Parents Good
- O - F: One Parent Outstanding, One Fair
- G - F: One Parent Good, One Fair
- O - C: One Parent Outstanding, One Fails Colour
- G - C: One Parent Good, One Fails Colour

For pragmatic reasons when the parents are of different class the boar would usually be better, but I have not attempted to analyse 'which way round' the pairings were. Also because this was a practical breeding programme rather than a research project, other possible matings (F - F, F - C & C - C) were not tried. I leave that kind of experimentation to the likes of P Gammie, who believes that one's best pigs should be given away.

The following table shows the results:

Mating	% Offspring Outstanding	% Offspring Good
O - O	17%	33%
O - G	7%	24%
G - G	1%	38%
O - F	5%	20%
G - F	5%	24%
O - C	4%	29%
G - C	5%	27%

If the mating involves two Outstanding parents the best results follow, with one pig in two being showable and one in six outstanding.

Matings involving one Outstanding parent only produce one in three showable and one in sixteen Outstanding, again one in three is showable, but only one in fifty is Outstanding.

The O - O result speaks very clearly 'MATE THE BEST TO THE BEST TO GET THE BEST' is clearly vindicated. Studs which do not put the best pigs back into the breeding programme are immediately facing a much lower percentage of success in producing Outstanding youngsters. When, in addition, you consider that some of the success of matings involving G, F and C pigs may be due to the presence of O ancestors in their pedigrees, some of whose qualities they inherit and pass on, using Outstanding pigs only in the show pen looks like an excellent medium-term method of ruining your stud.

Within my stud the most common mating numerically is O - G simply because most of the G sows are retained as well as all of the O ones, and there are three times as many Gs. These are then usually mated with O boars. Due to the common use of the O - G mating it actually has produced a greater number (but much smaller percentage) of Outstanding offspring than has O - O. Without checking the figures one could easily fall into the trap of regarding the O - G mating as being as good as O - O, and confining the O sows to showing. The proportion of show stock would then fall immediately, with an almost certain further erosion as the numbers of O pigs in the second and third generations of pedigrees reduced.

At times I have found myself short of a good show adult for a whole season, due to putting my best pigs in the breeding pen. The temporary lack of success that this situation brings is irrelevant when your aim is to produce a strain which will give winners for many years. When, pushed to find a show pig, I get beaten by the 'stud of the moment' the question which is really of most concern is whether I will still be facing such competition from this stud in five years' time. It is over this or longer periods that the success of your strain is really measured.

Of course, those starting up a stud are very rarely in the position of being able to mate together Outstanding individuals. They can't often be bought. Well for these people the results of matings involving G, F and C pigs are significant; as such pigs can be obtained. For if you get only G, F or C animals which are from a TOP strain, they will sooner or later throw an Outstanding specimen, albeit much less often than those better ones retained by the breeder. When this happens you don't show it to death or sell it, in the smug belief that you can breed another from the same inferior parents, you BREED FROM IT. In this way you can start O - Other matings, gradually upgrading your stock so as to be able to employ O - O so that your stud is consistently successful at top level.

The key is to get your stock from a strain where generations of inbreeding and intense selection have been carried out, so that even the least good individuals will throw a significant percentage of show pigs. Be careful though. In some so-called strains the percentage of show stock would not quite reach one in three and an Outstanding one might never appear!

Furthermore, do not believe that you can buy pigs of a certain strain from anyone other than the breeder of the strain. Apart from the fact that you cannot know what other stock may have been mixed in when you get stock from another source, different choices n matings have been made from pigs which the original breeder selected against in the first place. So do not look to get Phillips-strain pigs from anyone but G. Phillips, and anyone other than B. Mayoh selling Mayoh-strain Blacks should definitely be prosecuted for fraud. The fairest description of such animals is 'Bred from Stock Provided by X'. A strain involves far too personal a breeding and selection programme to be passed from person to person as if it were a second-hand umbrella.

7. Origins of Cavies With Colour Failings

As an excess of red hairs provides the most highly visible source of failure in the Self Black, it is not only very easy but quite important to trace their production, and in particular whether the use of red-haired parents produces an increased number of red-haired offspring.

The table below shows the occurrence of pigs with excess red hairs in the seven types of mating previously defined:

Mating	% Offspring with Excess Red Hairs
O - O	22%
O - G	22%
G - G	22%
O - F	20%
G - F	24%
O - C	23%
G - C	29%
Overall	23%

If the mating involves one red-haired parent, 26% (just over one in four) of the offspring also has excess red hairs. If the mating does not involve a red-haired parent, 22% of the offspring have excess red hairs.

This result was a little surprising to me, as commonsense had lead me to expect far more colour failures from matings involving a parent with this weakness. However, there is hardly any greater tendency for matings involving a red-haired pig to produce red-haired offspring than for other matings.

This again could be an important result for someone starting up. Regularly, I am asked for showable sows, which often are not available; but sows with red hairs (which would not even have been kept alive had they not had particularly good breeding or type) are not wanted. Yet the evidence is that not only do these pigs produce as many show pigs as all but the Outstanding ones (which are never for sale), but are scarcely more likely to produce lots of red hairs.

Before someone takes this comment to extremes, I must stress that these results arise from particular breeding methods, namely:

- The percentage of red-haired pigs in the stud has never been allowed to rise above circa 25%.
- Boars with excessive red hairs are rarely used (although I must admit one did produce a sow which won a 28 strong sow class at the NCC ASS 1981).
- Red-haired pigs from red-haired parents are not used.
- Red-haired pigs are only used for a good reason, i.e. good pedigree or type.

Given this sort of care the use of red-haired covies, particularly sows, in the breeding pen looks absolutely justified. This is particularly so for the ambitious beginner whose only route to getting pigs of good type from a winning strain is through red-haired stock. They are bound to produce winners and they must produce some offspring with good colour. Using these in the next generation of breeding gives a sound basis for future success.

Breeding principles

I couldn't suggest the following principles as representing proven scientific fact, but they have worked for me and are generally followed by other top breeders of the Self Black; and are offered in that spirit.

1. 'Stick to a Strain'

The idea of 'the Strain' is one of the major planks of successful small livestock breeding. Any breeder who aims to do well for a number of years must develop his own strain, in which intense selection for key characteristics is carried out over generations of basically closed breeding. Out crossing can give a lucky 'once off', and bringing in stock from another developer of the same original strain can be a useful weapon in importing a desired quality; but consistency only comes from knowing and using your own strain.

A strain may be created from stock of different sources, after several generations of inbreeding and selection, or developed from an existing strain, by a process of steady evolution. The leading Self Black exhibitors of the present day have followed the latter path. In either case, bad as well as good points will be established within the strain, and the breeder must watch these and control them.

2. 'Use judicious inbreeding'

Within a strain all the animals are related in being line-bred to a few common ancestors, but when you have a really outstanding individual closer inbreeding of the father-daughter or mother-son variety may be desirable to fix the qualities of the individual in your stud. Brother-sister may also be considered where a particular mating has produced consistently outstanding litters. My personal experience is largely with father-daughter, which worked extremely well when practised to a really outstanding boar (albeit with rather too many red hairs), Finrod Felagund.

Inbreeding of itself is not a magic formula, it is designed to fix qualities already in the individual to whom you are inbreeding; so care must be taken that this individual really does have some outstanding qualities.

3. 'Build a Pedigree-Plus'

Breeders such as Graham Phillips and Arthur Robinson have never kept records to help their development of the strain, relying on innate stockmanship. Arthur's

advice to me was that in an inbred strain the exact relationships involved in a mating are not terribly important, as all the stock goes back to the same recent origins. This being the case, it is necessary to be ruthless in selecting against stock with obvious weaknesses, or such weaknesses will become established in the strain.

What you are trying to do is to build a 'Pedigree-Plus' in each individual, a pedigree lined with top-class ancestors top and bottom, plus the physical characteristics expected of the ancestry. Such an animal is the ideal basis for further development of the stud, as a subject for future inbreeding or line breeding. A good pig with ancestors of inferior quality is less likely to breed offspring of his/her own quality: whilst use of a bad pig from good parents could represent a backward step for future development of the strain.

4. 'Breed the best to the best and hope for the best'

Even within an established strain in which all covies are quite closely related, matings of the best to the best will give the most successful results. The less-good sister of an outstanding sow is also a less-good breeding prospect; and you cannot afford to keep your best show stock too long away from the breeding pen.

5. 'Avoid duplicating faults'

When compromises have to be made, as they always do, it is best to mate an animal lacking a certain feature with one which is sound on that point and bred from stock who were similarly sound. It is also, in my view, dangerous to keep an animal with a fault whose parents also had the fault - it begins to feel a little endemic!

The latter principle I have always kept, so I cannot claim to have any first-hand evidence of what happens if you break it, although I have witnessed far more profusion of red-hairs in some studs where red-haired offspring of red-haired parents have been used for breeding. The first principle I do break, with a certain amount of devilment when it 'feels' right to take the risk (usually when both parents but none of the grandparents have shown the failing). On these occasions the results have been a mixture of total failure sprinkled with the kind of spectacular success which only adds to the glorious unpredictability of livestock breeding.

In this uncertainty lies the hope for the beginner. Within a well-developed strain which constantly produces top-class stock, 'pedigree will out', sooner or later. Even those individuals of inferior type or colour are potentially able to produce good offspring, albeit not with the same 'strike rate' of their better siblings. Such pigs, which are far more readily-available than show stock, offer a good starting-point for someone making a beginning with a breed. In breeds where winning strains are well-established there may be better prospects of success in using the less good pigs from a good strain than apparently better pigs with no such pedigree.

This completes my long trek through the judging, showing and breeding of the Self Black. I realise that those who have persisted this far will have differing perceptions of what I have tried to convey. The inexperienced will have found some of the jargon confusing and some of the advice not always consistent; but then consistency is a difficult goal given the great uncertainties of genetics. Some of the more expert will find certain statements obvious and others too subjective; but we are trying to breed winners not perform scientific experiments, and a certain subjectivity is perhaps essential to that goal. Whatever the reactions, I do hope that the former will have learnt something and that the latter will have discovered points of similarity or difference to add to their experience in breeding the beautiful Self Black.