Introduction

The first edition of this booklet was made available to the veterinary profession in 1930. It was in the form of a report from a Sub-Committee, which had been set up by the Council of the RCVS in 1928, to prepare a system of description, colours and markings, etc. of horses for the purpose of identifying individual animals.

Since that date there have been several revised editions. Amendments have been made in the light of experience and in response to the changing demands of the equine industry. The significant increase in the international movement of horses and the insistence by a growing number of organisations which hold shows, gymkhanas, events and other competitive functions that horse owners should supply proof of vaccination against equine influenza, have resulted in greater numbers of practitioners being asked to supply the relevant certification. Additionally DEFRA legislation came into force in 2004 requiring all horses to have a passport containing an accurate set of markings.

This latest edition (published May 2008) has been produced by Weatherbys, in conjunction with the RCVS and BEVA, in part as a result of the increased use internationally of microchip transponders to identify horses. Nevertheless, the passport, with its recording of a horse’s colour and markings, remains the essential means of identification for Thoroughbred and Non-Thoroughbred horses and ponies under the implementation Regulation of the EC Directives (Commission Regulation (EC) No. 504/2008 of 6 June 2008 and Council Directives 90/426/EEC and 90/427 EEC.

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Colours and Markings of Horses for Identification Purposes

Given the need for control and the widespread movement of horses for sporting activities, certificates of identification have an application and use beyond the veterinary profession. They are likely to be referred to most frequently by lay persons and non-professional bodies throughout the equine industry.

While appreciating that members of the veterinary profession might prefer to use modern scientific anatomical nomenclature in certificates to depict accurately the location of marks, the practice is undesirable in this particular field. Descriptive terms should be restricted to those which are readily understandable by the layman. Acceptable terminology is shown in figure 1.

The use of colloquial names not included in figure 1 should be discontinued and the terms ‘left’ and ‘right’ should be used exclusively. Care should be taken that the terms refer to the left and right side of the horse. The following list of body colours and markings is recommended as sufficient.

**Body Colours**

The principal body colours found in the horse are black, brown, bay, chesnut and grey, although certain additional colours are recognised - particularly by the Non-Thoroughbred authorities.

General guidance is offered on page 4 as to the basis upon which individual colours should be declared to be the colour of the horse being identified.

If there is doubt as to the colour to be assigned to the horse, one of the recognised colours must be declared on the identification document and an appropriate comment may be entered in the narrative. It should be noted that Thoroughbred authorities require foals to be identified by colours and markings before they attain four months of age. Where there is any doubt as to the foal colour, the muzzle and the eyelids should be carefully examined for further guidance.
Figure 1

Head and neck front view

KEY TO HEAD
1. cheek
2. jaw
3. crest (upper, mid, lower)
4. neck (upper, mid, lower)
5. jugular furrow (upper, mid, lower)
6. withers
7. shoulder
8. forearm
9. knee
10. cannon
11. fetlock
12. pastern
13. coronet
14. back
15. ribs
16. girth
17. belly
18. point of hip (or hip)
19. croup
20. hindquarter
21. buttock
22. stifle or stifle fold
23. thigh
24. hock
25. throat or upper windpipe
26. mid windpipe
27. lower windpipe
28. chest
29. pectoral
30. heel
31. inner heel
32. outer heel
33. hoof
34. base of forelock
35. forehead
36. upper eye level
37. mid eye level
38. lower eye level
39. bridge of nose
40. face
41. muzzle or nose
42. upper lip
43. lower lip
44. midline
45. poll
Section A
(This section lists the colours commonly occurring in Thoroughbreds)

Bay:
The reasonably clearly defined colour line between the black lower part of the legs and the general tan/brown colour of the upper legs and body. Mane and tail are black. Avoid the use of the terms light bay and dark bay because seasonal colour variation can make them misleading.

Brown:
The whole coat is brown, with no distinguishing colour line between the upper and lower part of the legs, with a brown mane and tail. Often there is some tan in the stifle fold and muzzle.

Black:
The whole coat, including legs, body, stifle fold and muzzle must be black. Any indication of tan in coat, stifle fold or muzzle should classify the horse as brown. Black horses may have lack of pigment in the hoof when white marks are seen on the legs.

Chesnut:
The coat is reddish or yellowish brown. The mane and tail are chesnut, and may be lighter or darker than the body colour.

Grey:
The body coat is a mixture of black and white hairs, with the skin black. With increasing age the coat grows lighter in colour. As there are many variations according to age and season, all of them should be described by the general term ‘grey’. The majority of grey horses are not grey as young foals. All foals should be described with their predominant coat colour, but any white hairs should be noted in the narrative.

Roan:
The basic body colour is a mixture of many white and brown or chesnut hairs and the intensity of this is subject to seasonal variation. The description ‘roan’ is now acceptable to Thoroughbred Authorities, but Thoroughbreds are rarely roan. Most of those, which appear to be so, are in the transition period of going grey.
Section B
(This section lists the additional colours not commonly occurring in Thoroughbreds)

Blue Roan.
Where the body colour is black or black-brown, with an admixture of many white hairs, which gives a blue tinge to the coat. On the head and the limbs from the knees and hocks down, the black hairs usually predominate; white markings on limbs may be encountered.

Bay or Red Roan.
Where the body colour is bay or bay-brown with an admixture of many white hairs which gives a reddish tinge to the coat. On the head the bay hairs usually predominate. On the limbs from the knees and hocks down, black hairs usually predominate: white markings may be encountered.

Strawberry or Chesnut Roan.
Where the body colour is chesnut with an admixture of many white hairs. On the head and limbs from the knees and hocks down, chesnut hairs usually predominate; white markings may be encountered.

Blue Dun.
The colour of the body coat may vary between one animal and another from slate grey to light stone, but is always evenly distributed. The mane and tail are black. There may or may not be a dorsal stripe (list) down the back and/or withers stripe. The skin is black.

Yellow Dun.
There is a diffuse yellow pigment in the hair. There may or may not be a dorsal stripe (list) and/or withers stripe and bars on the legs. The striping is usually associated with black pigment on the head and limbs. The skin is black.

Cream.
The body coat is of a cream colour, with unpigmented skin. The iris is deficient in pigment, and is often devoid of it, giving the eye a pinkish or bluish appearance.

Piebald.
The body coat consists of large irregular patches of black and white. The line of demarcation between the two colours is generally well defined.

Skewbald.
The body consists of large irregular patches of white and of any definite colour except black. The line of demarcation between the colours is generally well defined.

Palomino.
Newly-minted gold coin colour (lighter or darker shades are permissible), with a white/flaxen mane and tail.

Spotted.
Basic coat colour usually (but not invariably) roan with varying mosaic of spots; may be dark spots on white ground and/or white spots on dark ground over either part or all of the body.
Section C

(Markings)

Markings
The variations in markings of horses are infinite and cannot be accurately described by a limited number of terms without certain arbitrary groupings. In some cases a combination of the terms given below must be employed. It is stressed that all certificates of identification should, in conformity with later remarks, consist of a narrative accompanied by a sketch on which the markings are indicated accurately. All marks of identification should be recorded.

White Markings
Any white marking on the horse must be outlined in the sketch in red, using a ball point pen and lightly hatched in with diagonal lines so that any whorl contained therein is not obliterated. A few white hairs lacking a distinct outline are indicated by a few short lines.

If the boundary of a white mark is not clearly defined, one of the following descriptions should be used:

Mixed
To be used to describe a white marking which contains varying amounts of hairs of the general body colour. Described as mixed in the narrative. Drawn as any other white mark:

Bordered
To be used where any marking is circumscribed by a mixed border, e.g., 'bordered star', 'bordered stripe'. Drawn as:

Flesh Marks
Patches where the pigment of the skin is absent should be described as 'flesh marks’. Drawn as:

Bordered Flesh Marks
If a flesh mark is circumscribed by a mixed border it should be described as a ‘bordered fleshmark’. Drawn as:

Head
Star. Any white mark on the forehead. Size, shape, position and coloured markings (if any) on the white to be specified. Should the marking in the region of the centre of the forehead consist of a few white hairs only it should be so described, and not referred to as a star.

Stripe. A narrow white marking down the bridge of the nose. In the majority of cases a star and stripe are continuous and should be described as star and stripe conjoined. Where there is a gap in the length of the stripe it should be described as an interrupted stripe. Where a stripe is separated from the star, or no star is present, its point of origin should be indicated. The termination of all stripes and any variation in breadth, direction and any markings on the white should be so stated, e.g., broad stripe, narrow stripe, inclined to left, terminating at the upper left nostril, etc.
Blaze. A white marking covering almost the whole of the forehead between the eyes and extending beyond the width of the bridge of the nose on to the face and usually to the muzzle. Any variations in direction and termination should be stated.

White Face. Where the white covers the forehead and front of the face, covering one or both eyes, extending laterally towards the mouth.

Snip. An isolated white marking situated between, or in the region of, the nostrils. Its size, position and intensity should be specified.

Lip Markings. Should be accurately described, whether embracing the whole or a portion of either lip.

White Muzzle. Where the white embraces both lips and extends to the region of the nostrils.

Body

Flecked. Where small collections of hairs other than the normal body colour occur, distributed irregularly in any part of the body. The degrees of flecking may be described by the terms ‘heavily flecked’, ‘lightly flecked’, and the colour of the flecking should also be specified.

Limbs

Hooves. Any variation in the colour of the hooves should be noted. It is usual for the hoof to be lighter coloured if the limb is white.

White Markings on Limbs. White markings on the limbs should be accurately described by reference to figure 1 and the extent precisely stated, e.g. ‘white to half pastern’.

Whorls

Whorls are formed by changes in direction of flow of the hair. They may take various forms depending on the interface at which two or more flows of hair meet, e.g. simple, tufted, linear, crested, feathered, and sinuous, but all fall into one of the three categories described below:

Simple A focal point from which the hairs diverge; this requires only the term ‘whorl’ in the narrative. Show as ‘x’.

Linear Two opposing sweeps of hair meet from opposite directions along a line, with or without forming a crest. Show as ‘—’ and use the term ‘linear whorl’.

Feathered Two sweeps of hair diverge along a line but the direction of flow of each sweep is at an angle to the other so that together they form a feathered pattern. Use the term ‘feathered whorl’ and show as ‘x –’ with the line indicating the direction of feathering.

Head Whorls. The position of head whorls should be clearly specified with reference to midline and eye level, to white markings, and to each other if two or more occur in close proximity.
Neck Whorls. The neck is divided into three parts - upper, mid and lower. Any reference to the position of whorls should be described as such and by their location i.e. crest, neck, jugular groove and windpipe. (See figure 1)

Other Whorls. The anatomical position of any whorl should be stated and indicated as accurately as possible.

In all cases, whether there are white marks or not, all whorls should be described in the narrative, and indicated in the sketch. It should be noted that the absence of crest whorls is in itself an identifying feature. Should no crest whorls be present on one or both sides this should be noted in the narrative.

Other Characteristics

Acquired Marks. There are many acquired marks which are permanent and usually seen as white hairs e.g. saddle marks, bridle marks, collar marks, girth marks and other harness marks, permanent bandage marks, branding marks, surgical scars and tattoo marks. Wherever these occur they should be described in the narrative and their location indicated in the sketch by an arrow.

Microchip Site. Microchips can normally be found in the middle third of the left crest. Any site that differs from this should be indicated thus: \( m \) and described in the acquired markings section of the narrative.

Wall-eye. This term should be used exclusively where there is such a lack of pigment, either partial or complete, in the iris as to give a pinkish-white or bluish-white appearance to the eye. Any other important variations should be noted.

The ‘Prophet’s Thumb Mark’. This is a muscular depression seen usually in the neck, but sometimes in the shoulders and occasionally in the hindquarters. It should be indicated on the sketch by a triangular mark \( \triangle \) and described in the narrative.

Coloured Marks. This term should be used to describe areas of coloured hairs among white or any other colour. The colour, shape, position and extent should be described.

Mane and Tail. The presence of differently coloured hairs in the mane and tail should be specified.

Dorsal Stripe (List) A dorsal band of black hairs which extends from the withers backwards.

Zebra Stripes on the legs. Black bars on the legs found on dun coloured horses. The outline of these bars should be drawn, but not hatched in. Describe in the leg boxes as zebra stripes.

Chestnuts. The common shapes of these horny growths on the inside of the legs are round, oval, pear-shaped, irregular pointed (at top, below, etc) and notched (above, below, etc). Chestnuts may be vestigial on, or even absent from, the occasional leg. The shape of the chestnuts may be useful in the absence of other identifying features, but need not be recorded in animals with an implanted microchip transponder.
Section D
(This section relates to Donkeys)

Donkeys

List of Colours acceptable to the Donkey Breed Society:

- Dun
- Dark Brown
- Light Brown Dun
- Grey Brown Dun
- Brown Roan
- Black/Brown
- Grey/Brown
- Piebald (Black & White), Skewbald (Brown and White, Grey and White, or any other colour and White).

The ears of a donkey are often a different colour from the rest of the coat. If present, this should be noted, but this should not modify the description of the remainder of the body. The ear colour should be described separately. (E.g., a grey donkey with brown ears).

The following distinguishing marks should be listed on identification forms where applicable:

- Dark Cross
- Pale Muzzle
- Dark Muzzle
- Pale Eye Rings
- Dark Eye Rings
- Pale Jowls
- Pale Throat
- Dark Eye
- Pale Chest
- Pale Belly
- Striped Legs
- Any light markings on inside or outside of legs
- Colour of mane and tail
- Colour of each hoof
- Any other distinguishing marks
- All whorls should be described, plus any significant marks.

The presence or absence of the dorsal stripe (list) and shoulder cross should be noted. When present, a full description of these items should be included (e.g., colour, length, shape, uniformity).

It should be noted that freeze brands on donkeys with long (i.e., winter) coats are often illegible.

The ventral stripe, under the belly, is often a significantly different shade from the rest of the body and, if so, should be described.

The ‘Prophet’s Thumb Mark’ is seen in donkeys and should be described. Some donkeys regularly display a small black mark (<3cm diameter) on, or close to, the jugular furrow i.e., exactly the site where one expects to see ‘Prophet’s Thumb Mark’ in the horse. Therefore, mention of the ‘Prophet’s Thumb Mark’ should always be clarified by either ‘depressed’ or ‘black spot’ type.
Section E
(Taking the Markings)

Certificates should be typed wherever possible or, alternatively, handwritten in block capitals in black ball point pen.

Work in a systematic and methodical way to avoid omissions. The horse should be free from dirt and viewed on a firm, level surface in natural light. Always check for the presence of a microchip, freeze brand and tattoo.

Both the drawing and narrative should be completed fully whilst on site and care should be taken to ensure that there is no contradiction between the written and graphic description when transcribing these markings at a later date. It is important to ensure the accuracy of the copy. Use a red ballpoint pen to draw all white markings and a black ballpoint pen for any other marks.

Hint Record the name, breeding, age, colour and sex before starting.

Begin by recording the head markings. Note the position of the whorls on the forehead and check for unusual forelock whorls, taking care to lift the forelock. Accurately record the shape of any star, stripe and snip.

Hint The upper and lower lips often have useful identifying marks that should be carefully recorded.

Next move to the left side of the horse and record the position of the left crest whorl. Virtually all horses possess crest whorls so check very carefully if you think that there are none. If there are not, this must be included in the narrative. Record any neck and jugular groove whorls. Examine the jaw, throat and windpipe area for whorls. These are often feathered.

Hint The chest area often contains helpful whorls.

Next view the whole horse from the left. Record accurately the extent of white on the outside of the left limbs and on the inside of the right limbs and whether the margins are simple or bordered. Coronary band markings and the colour of the hooves should be noted. Pigmented hoof stripes are useful.

Hint There are often whorls present on the outside or back of the forearm.

Look carefully for double stifle whorls, flank whorls and whorls low down on the belly.

Next view the animal from the rear recording accurately the limits of any white on the legs. Small amounts of white on heels are often missed. Record white hairs in the tail root.

Hint Look for whorls on the buttocks, which may be on one or both sides and may be feathered.

Repeat the examination from the right of the animal and record the white markings on the outside of the right legs and the inside of the left legs. Complete the identification by recording the position of the right crest whorl, neck and jugular groove whorls on the right and any whorls on the outside of the right foreleg.
FOAL DNA SAMPLING FORM

Please read new instructions overleaf before completing this form. Once completed send this form with the blood sample to the A.H.T.

NAME OF BREEDER/BOARDING STUD

ADDRESS

TELEPHONE

*THESE ITEMS ARE BASED ON INFORMATION SUPPLIED BY THE OWNER OR THEIR AGENT. PLEASE WRITE CLEARLY.

NAME AND ADDRESS OF VETERINARY SURGEON (IN BLOCK CAPITALS) I certify that I have read and understood the instructions overleaf. I have been given the pedigree details by the owner/agent who has assured me that they have confirmed the identity of the dam against her passport. I have also,

*  bloodsampled the foal,
*  inserted a Weatherbys Microchip into the foal,
*  scanned and read a Weatherbys microchip previously inserted.

Signature of Veterinary Surgeon (not to be the breeder, owner or trainer of the horse)

Please affix a Weatherbys microchip barcode here and to the sampling tube.

Date of examination

5795331801
Section F
(Microchipping)

Microchipping is widely accepted as a safe, quick, permanent and effective means of identifying horses, in addition to the normal passport markings check.

The standard site for microchip implantation is embedded in, or adjacent to, the nuchal ligament at the top of the left mid crest. Adequate restraint of the horse is essential during microchipping. The neck should be scanned for the presence of a microchip prior to implantation, checking both sides of the neck in case of previous unrecorded implantation. Before inserting the microchip it should be tested to ascertain it is functioning, then checked again after implantation to confirm successful placement. It is important to ensure that the type of scanner used is appropriate for use in horses and is compatible with the microchip.

If a microchip is found away from the left side mid crest, the site of the microchip should be located and recorded on the markings diagram using the symbol \( m \) to aid future identification of the horse.

Since the introduction of microchipping, many breed societies now use microchips as an aid to identification of the horse and it may be worth checking with these as to their specific requirements. For example, since 1999 all Thoroughbred foals to be registered in the General Stud Book and the Weatherbys Non-Thoroughbred Register require microchipping as a condition of registration. When microchipping for this purpose, markings and a blood sample should be taken at the same time. The barcode label should then be attached to the markings document where indicated and, in order to allow the laboratory to process the blood sample efficiently, the test tube should have the barcode affixed lengthways on the tube so that it can be read with a barcode scanner.

Under EU legislation for the Identification of Equidae, all passport applications received from July 2009 must be for horses/ponies/donkeys/mules which have been microchipped.