

Breeding Birds—Zebra Finches



This fact sheet gives guidance on breeding Zebra Finches.

BUYING YOUR STOCK

Purchasing Stock

Having prepared your cages or flight you are now in a position to purchase stock. Being available in many colours makes Zebra Finches the ideal subject matter for those wishing to breed an attractive selection, either for their own beauty or as part of a mixed collection.

Alternatively, you may intend to embark on the ultimate challenge of producing a stud of exhibition Zebras. Whichever your choice you will derive great pleasure as long as you take a little care with your initial purchases.

What Colour

There are many colour forms (mutations) available, however it is probably best when starting off if you select mutations that are recognised by the Zebra Finch Society as you are then purchasing a known quantity in as much as when these mutations are mated together they will generally produce like. The Z.F.S.

currently recognises the following mutations: Normal Grey, Fawn, Chestnut Flanked White, Pied, Silver, Cream, White, Lightback and Penguin, and all are generally available.

Sexing Stock

Zebra Finches are easy to sex - cock birds carrying cheek patches, throat stripes, chest bar and flank markings. Hens, of course, lack these. The two exceptions to this are Whites, which are devoid of any markings whatsoever but in most instances can be sexed by beak colour, the cocks being deep red when in condition and the hens being considerably paler; and the Penguin which retains all normal markings with the exception of tear marks which should be absent on both cock and hen. Also, the cock bird should not have any throat stripes or chest bar. Therefore you should have few problems when selecting breeding pairs.

Source of Supply

All reputable pet shops and bird farms will stock a few Zebra Finches at a reasonable cost.

Alternatively you should approach a breeder, who should be a member of the Zebra Finch Society. The breeder will have intimate knowledge of his stock and will usually close ring all young birds. This is quite important as these rings fitted on baby birds act as a form of pedigree, a part of which gives the year the bird was bred and thus determining its age.

Therefore the advantage of breeder over bird farm is that a breeder is able to supply unrelated breeding pairs of guaranteed age.

What To Look For

Initially you should be looking to purchase birds no older than eighteen months as these will have a good breeding life ahead of them. Health-wise any

prospective purchase should be active and not subdued, eyes should appear bright and clear. Beaks should be checked to ensure that they are free of growths and deformities, as should feet and legs.

Also check that feet grip perches, birds with foot defects will often have difficulty perching. Avoid birds that show any sign of dampness around the vent, as this could be a sign that there is an internal problem such as enteritis. Missing feathers, as long as there aren't too many, should not discount a bird as Zebras, when kept in groups, can be notorious feather pluckers.

SELECTING THE VARIETY

NORMAL (GREY)

COCK: Eyes dark. Head, neck and wings dark grey. Breast bar jet black. Throat and upper breast pale grey with black (Zebra) lines running from cheek to cheek continuing down to breast bar. Underparts white which may have some fawn shading near the vent and thighs. Cheek patches dark orange. Tear markings black and distinct. Tail, black with white bars, side flankings reddish brown with even clear white spots.

HEN: As for Cock minus breast barring, throat markings, cheek patches, and flank markings. Tear markings black and distinct. Throat and upper breast grey. Underparts off white.

Show faults: Brown shading on wings and mantle and white tips to wing flight feathers. Excessive fawn shading to underparts.

FAWN

COCK: Eyes dark. Head, neck and wings deep even fawn. Breast bar blackish brown. Throat and upper breast light fawn with zebra lines running from cheek to cheek continuing down to breast bar. Underparts white, may have some fawnish shading near the vent and thighs. Cheek patches dark orange. Tear markings the same shade as breast bar. Tail blackish brown barred with white, side flankings reddish brown with even clear white spots.

HEN: As other hens but of the same shade of fawn as the cock.

Show faults: White or darker coloured tips to wing flight feathers. Excessive fawn shading on underparts.

PIEDS (ALL STANDARD VARIETIES)

COCK AND HEN: Eyes dark. Body colour broken with white approximately 50% of each colour. Good balanced well matched pairs are acceptable in the range 40% to 60% Cocks - to retain all cock markings in broken form. Tear markings distinct but should be broken.

Exhibition pairs to be matched for pied markings.

Show faults: Loss of cock markings which should be shown in broken form.

WHITES

COCK OR HEN: Eyes dark. Colour to be pure white all over. Hens should have beaks of a paler shade of red.

Show faults: Any coloured feathering.

DOMINANT SILVER (DILUTE NORMAL)

COCK: Eyes dark. There are various shades of dilute Normal, silvery grey being the ideal. Breast bars vary from sooty to pale grey. Throat and upper breast matching body colour with diluted zebra lines to match breast bar.

Underparts white which may have silvery shading near vent and thighs. Cheek patches vary from pale orange to pale silver. All other markings diluted to the same degree as body colour - the lighter the body colour the paler the markings.

HEN: As other hens but of the same shade to match the cock.

Show faults: Uneven colouration, fawn shading, characteristic markings too pronounced or indistinct.

DOMINANT CREAM (DILUTED FAWN)

COCK: Eyes dark. There are various shades of dilute Fawn, from deep cream to pale cream. Breast bars vary from dark to pale fawn. Throat and upper breast matching body colour with diluted zebra lines to match breast bar.

Underparts white which may have cream shading near vent and thighs. Cheek patches vary from pale orange to cream. All other markings diluted to the same degree as body colour - the lighter the body colour the paler the markings.

HEN: As other hens but of the same shade to match the cock.

Show faults: Uneven colouration, fawn shading, characteristic markings too pronounced or indistinct.

RECESSIVE SILVER (DILUTE NORMAL)

COCK: Eyes dark. Head, neck and mantle medium bluish grey, wings grey. Breast bar dark grey. Throat and upper breast matching the body colour with diluted zebra lines to match breast bar. Underparts white, may have silver shading near the vent and thighs. Cheek patches orange. Side flankings light reddish brown with even, clear white spots. All other markings to be the same shading as breast bar.

HEN: As other hens but of the same shade to match the cock.

Show faults: Uneven colouration, fawn shading, indistinct markings.

RECESSIVE CREAM (DILUTE FAWN)

COCK: Eyes dark. Head, neck and wings medium cream. Breast bar brown. Throat and upper breast medium cream matching body colour with diluted zebra lines to match breast bar. Underparts white, may have cream shading near the vent and thighs. Cheek patches orange. Side flankings reddish brown with even, clear white spots. All other markings to be the same shade as breast bar.

HEN: As other hens but of the same shade to match the cock.

Show faults: Uneven colouration, fawn shading, indistinct markings.

LIGHTBACKS (NORMAL GREY)

COCK: Eyes dark. Head, neck and wings light silvery grey. Breast bar black. Throat and upper breast light silvery grey with black zebra lines to match breast bar. Underparts white with no shading. Cheek patches pale orange. Side flankings pale reddish brown with even, clear white spots. Tear markings and tail bars black.

HEN: As other hens but of the same shade to match the cock.

Show faults: Pairs not matching for colour.

NB There can be Lightback forms of the other recognised colours which may be exhibited.

CHESTNUT FLANKED WHITES

COCK: Eyes dark. Head, neck, breast and wings as near white as possible. Breast bar as near black as possible. Throat and upper breast white with zebra lines to match breast bar.

Underparts white. Cheek patches orange, side flankings reddish brown with even, clear white spots. Tear markings and tail markings to match colour of breast bar.

HEN: As other hens to match cock. May have light head markings.

Show faults: Characteristic markings in cocks too pale. Excessive dark head markings on hens.

PENGUINS (NORMALS)

COCK: Eyes dark. Head, neck and wings grey with flight, secondary and covert feathers edged with paler shade of grey giving a frosted effect.

Underparts, from beak to vent, white without any trace of barring. Cheek patches pale orange. Flank markings reddish brown with clear even white spots. Tear markings absent. Tail grey barred with white.

HEN: As other hens but with white cheek patches. Tear markings absent.

Show faults: Barring of chests and any trace of tear markings.

N.B. Frosting does not show to full advantage until second moult.

The Penguin variety tends to be smaller than other varieties and this will be taken into consideration by Z.F.S. Panel Judges.

There can be Penguin forms of the other recognised colours which may be exhibited.

YELLOW-BEAKS

COCK & HEN: As with red beaked forms, but with yellow beaks and legs to match.

Show faults: As with corresponding red beaked forms plus beak colour too dark.

N.B. Yellow-beaked colour forms are exhibited in true pairs of the same mutation and should be entered in the same class as the corresponding red beaked colour forms.

BLACKCHEEKED NORMAL

COCK: Eyes dark. Head, neck and wings dark grey. Breast bar jet black. Throat and upper breast pale grey with black zebra lines running from cheek to cheek, continuing down to the breast bar. Underparts white, which may have some fawn shading near the vent and thighs.

Cheek patches black with no trace of brown. Tail black, with white bars. Flank markings black with even round white spots. Beak red, legs and feet orange.

HEN: As for cock, minus breast barring, throat markings, and flank markings. Cheek patches to be full and black, but may be less strong than for the cock. Throat and upper breast grey. Underparts off white to vent.

Show faults: Brown shading in cheek patches in both sexes and flanks on cocks. Cock markings (e.g. chest bars) on hens. Brown shading on mantle and wings, and white tipping to wing feathers. Excessive fawn shading to underparts.

BLACKCHEEKED FAWN

COCK: Eyes dark. Head neck and wings dark fawn. Breast bar blackish brown. Throat and upper breast fawn with blackish brown zebra lines running from cheek to cheek from the bill down to the chest bar. Underparts white, but there may be some pale fawn shading near the vent and thighs. Cheek patches deep blackish brown with no trace of orange. Tail deep brown with white bars. Flank markings as dark as possible with even round white spots. Beak red, legs and feet orange.

HEN: As for cock, minus breast barring, throat markings, and flank markings. Cheek patches full and deep brown, but may be less strong than for the cock. Throat and upper breast light fawn. Underparts white.

Show faults: Poor colour matching between cocks and hens. White or orange colouration to the wing flight feathers. Too much fawn or cream shading on the underparts. Orange feathers in the cheek patches and flanks.

BLACKCHEEKED PIED

COCK: As for the Normal, Fawn, etc. Blackcheeked, but with the body colour broken with white, approximately 50%. Well matched pairs are acceptable in the range 40-60%. Cocks to retain all cock markings in broken form. Beak red, legs and feet orange.

HEN: As with the cock, but lacking the cock markings except for the cheek patch. The cheek patch should be broken with white

Show faults: Poor matching of pairs and unevenness of white areas. Loss of markings, especially on cocks.

BLACKCHEEKED DOMINANT SILVER

COCK: Eyes dark. There are various shades of Silver, silvery grey being the ideal. Breast bars sooty to pale grey, throat and upper breast matching body colour with diluted zebra lines to match breast bar. Underparts white which may have pale cream or silver shading near vent and thighs. Cheek patches silvery grey, the level of dilution to be similar to that of the chest bar. Side flankings grey with even round white spots. Tail grey to match the colour of the chest bar with white bars. Beak red, legs and feet orange.

HEN: As for the cock, minus breast barring, throat markings, and flank markings. Cheek patches silvery grey and full, but may not be as strong as the cock. Throat and upper breast silvery grey to match the cock.

Show faults: Uneven colouration, fawn shading, characteristic markings too pronounced or too indistinct. Poor matching of colour of cock and hen.

BLACKCHEEKED DOMINANT CREAM

COCK: Eyes dark. There are various shades of Cream, from light to dark, with a greyish tinge. However the head, neck, back and wings should be of an even shade without patchiness. Breast bars and zebra lines greyish fawn. Throat and upper breast matching body colour. Underparts white. Cheek patches greyish fawn to off-white, of an intensity to match the level of dilution of the other markings. Flank markings greyish brown with even white spots. Tail greyish brown with white tail bars. Beak red, legs and feet orange.

HEN: Same as the cock, but without chest bar, zebra lines and flank markings. Cheek patches should be full and greyish brown, but may not be as strong as the cock. Throat and breast colour to match the cock.

Show faults: Uneven coloration. Poor matching of colour between the cock and hen. Characteristic markings too faint or too dark.

BLACKCHEEKED LIGHTBACK

COCK: Eyes dark. Head, neck and wings silvery grey. Chest bar black, throat and upper chest silvery grey with black zebra lines to match chest bar.

Underparts white with no shading. Cheek patches black. Side flankings black with even, clear round white spots. Tear markings and tail markings black to match colour of the chest bar.

Beak red, legs and feet orange.

HEN: As with the cock, minus chest barring, throat markings, and flank markings. Cheek patches to be full and black, but may be less strong than for the cock. Throat and upper chest silvery grey. Underparts off white to the vent.

Show faults: Patchiness on back and wings. Breast bars on hens. Pairs not matching for depth of colour.

BLACKCHEEKED CHESTNUT FLANKED WHITE

COCK: Eyes dark. Head neck and wings white. Chest bar black, throat and upper breast white with zebra markings to match the chest bar. Underparts white. Cheek patches black. Side flankings as dark as possible with even, clear white spots. Tail black to match the colour of the chest bar, with white bars. Beak red, legs and feet orange.

HEN: As for cock, minus breast barring, throat markings and flank markings. Cheek patches to be full and black, but may be less strong than for the cock.

Show faults: Excessive sooty markings on the head, and creaminess in the white parts. Too great a dilution of the black coloration in the cheeks, breast bar, zebra markings, and flank markings. Brown shading in cheek and (on cocks) flank markings.

BLACKFACED NORMAL

COCK: Eyes dark. Head, neck and wings dark grey. Triangular facial area below eye between tear mark and beak to be solid jet black. Throat and upper breast pale grey with black zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar thick (minimum 0.5 inch) and black, extending down the chest, becoming grey

as it merges into the off-white belly. Cheek patches orange and well defined. Flank markings chestnut with even, round white spots. Undertail shows striations of black and white horizontal stripes, extending up to and beyond vent. Tail black, with white horizontal bars. Beak red, legs and feet orange.

HEN: As for the cock, minus breast barring, cheek patches, throat and flank markings. Throat and upper breast grey, at least half an inch deep. Facial area below eye, between beak and well defined tear mark should be grey. Undertail striations should be faint, but present.

Show faults: Pale facial markings on either cock or hen. Loss in number, size, and shape of white spots on flank of cock. Lack of definition of cheek patches on cocks.

BLACKFACED FAWN

COCK: Eyes dark. Head, neck and wings dark fawn. Triangular facial area below eye between tear mark and beak to be solid very dark brown. Throat and upper breast should be light fawn with deep brown zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar thick (minimum 0.5 inch) and blackish brown, extending down the chest, becoming greyish fawn as it merges into the off-white belly. Cheek patches orange and well defined. Flank markings chestnut with even, round white spots. Undertail shows striations of dark brown and white horizontal stripes, extending up to and beyond vent. Tail dark brown with white horizontal bars. Beak red, legs and feet orange.

HEN: As for the cock, minus breast barring, cheek patches, throat and flank markings. Throat and upper breast light fawn, at least half an inch deep. Facial area below eye between beak and well defined dark brown tear mark should be fawn. Undertail striations should be faint, but present.

Show faults: Pale facial markings on either cock or hen. Loss in number, size and shape of white spots on flank of cock. Lack of definition of cheek patches on cock.

BLACKFACED PIED

COCK: As for the Normal, Fawn, etc. Blackfaced, but with the body colour broken with white, approximately 50%. Well matched pairs are acceptable in the range 40-60%. Cocks to retain all cock markings, including the black face, but broken with white. Beak red, legs and feet orange.

HEN: As for the Normal, Fawn etc. Blackfaced hens, with all areas of the bird broken with white.

Show faults: Poor matching of pairs and unevenness of white areas. Loss of markings, especially on cocks.

BLACKFACED LIGHTBACK

COCK: Eyes dark. Head neck and wings silvery grey. Triangular facial area below eye between beak and tear mark solid jet black. Throat and upper breast light grey with black zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar thick (minimum 0.5 inch) and black, extending down the chest, becoming grey as it merges into the white belly. Cheek patches orange and well defined. Flank markings chestnut with even, round spots. Undertail shows striations of

black and white horizontal stripes, extending up to and beyond the vent. Tail black with white horizontal bars. Beak red, legs and feet orange.

HEN: As for the cock, but minus breast barring, cheek patches, throat and flank markings. Throat and upper breast light grey, at least half an inch deep. Facial area below eye between beak and well defined black tear mark should be light grey. Undertail striations should be faint, but present.

Show faults: Pairs not matching for depth of colour on head, neck and wings. Pale facial markings on either cock or hen. Loss in number, size, and shape of white spots on flank of cocks. Lack of definition of cheek patches on cocks.

BLACKFACED CHESTNUT FLANKED WHITE

COCK: Eyes dark. Head, neck and wings white. Triangular area below eye between beak and tear mark solid black. Throat and upper chest white with black zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar thick (minimum 0.5 inch) and black, extending down the chest, becoming grey as it merges with the white belly. Cheek patches orange. Flank markings chestnut with even, round white spots. Undertail shows striations of grey and white horizontal stripes, extending up to, and beyond the vent. Tail white with grey barring.

HEN: As for cock minus breast barring, cheek patches, throat and flank markings. Throat, breast and underparts white to tail. Facial area between beak and tear mark may be white. Undertail striations should be present.

Show faults: Pale facial markings on cocks. Loss in number, size and shape of white spots on flank of cocks. Lack of colour and definition of cheek patches on cocks.

NB: Blackfaced English CFW hens are difficult to distinguish from standard (normal) CFW hens except for the presence of the striations near the vent area. Blackfaced Continental CFW hens have a pale cream throat and upper breast, and the area between the beak and tear mark is also pale cream.

BLACKBREASTED NORMAL

COCK: Eyes dark. Head neck and wings dark grey. Flight feathers edged with orange brown. Breast bar jet black, extending upwards into the zebra lines, causing them to appear rather mottled. The width of the chest bar should be at least half an inch. Lower chest and underparts off-white to white. Cheek patches orange, extending beyond the normal outline towards the top of the head and behind neck. Facial area white with no tear mark. Flank markings chestnut with elongated white splashes instead of round white spots. Tail predominantly white with black vertical lines, joined in a loop at the end of the tail. Beak red, legs and feet orange.

HEN: As for the cock, but minus breast bar, throat markings, flank markings, and cheek patches (which may however be seen as paler in colour than the head and neck). Throat and upper breast white to off-white as well as lower breast and chest. Flight feathers edged with cream or orange.

Show faults: Pale markings on cocks. Lacing not showing on flight feathers Horizontal bars on tail. Tear marks visible. Greater than 50% white in flank markings on cocks. Cheek patches of cock defined and not extending beyond normal boundaries

BLACKBREASTED FAWN

COCK: Eyes dark. Head, neck and wings dark fawn. Flight feathers edged with orange. Breast bar very dark brown, extending upwards into the dark brown zebra lines, causing them to appear rather mottled. The width of the chest bar should be at least half an inch. Lower chest and underparts creamy white. Cheek patches orange, extending beyond the normal outline towards the top of the head and behind neck. Facial area white with no tear mark. Flank markings chestnut with elongated white splashes instead of round spots.

Tail

predominantly white with brown vertical lines, joined in a loop at the end of the tail. Beak red, legs and feet orange.

HEN: As for the cock minus breast bar, throat markings, flank markings, and cheek patches (which however may be seen as paler in colour than the head and neck). Throat and upper chest creamy fawn, underparts cream. Flight feathers edged with cream or orange.

Show faults: Pale markings on cocks. Lacing not showing on flight feathers. Horizontal bars on tail. Greater than 50% white in flank markings on cocks. Cheek patches on cock not extending beyond normal boundaries.

BLACKBREASTED PIED

COCK: As for Normal, Fawn etc. Blackbreasted, but with the body colour broken with white, approximately 50%. Well matched pairs are acceptable in the range 40-60%. Cocks to retain all cock markings, including the enlarged breast bar and extended cheek patches, but broken with white. Beak red, legs and feet orange.

HEN: As for the Normal, Fawn etc. Blackbreasted hens, with all areas of the bird broken with white.

Show faults: Poor matching of pairs and unevenness of white areas. Loss of markings, especially on cocks.

BLACKBREASTED LIGHTBACK

COCK: Eyes dark. Head, neck and wings silvery grey. Flight feathers edged with orange. Breast bar jet black, extending upwards into the zebra lines causing them to appear rather mottled. The width of the chest bar should be at least half an inch. Lower chest and underparts white. Cheek patches orange, extending beyond the normal outline towards the top of the head and behind neck. Facial area white with no tear mark.

Flank markings chestnut with

elongated white slashes instead of round spots. Tail predominantly white with black vertical lines, joined in a loop at the end of the tail. Beak red, legs and feet orange.

HEN: As for the cock minus breast bar, throat markings, flank markings and cheek patches (which however may be seen as paler in colour than the head and neck). Throat and upper chest pale grey, underparts white. Flight feathers edged with creamy white.

Show faults: Pale markings on cocks. Lacing not shown on flight feathers. Horizontal bars on tail. Greater than 50% white in flank markings on cocks. Cheek patches on cocks not extending beyond normal boundaries.

BLACKBREASTED CHESTNUT FLANKED WHITE

COCK: Head, neck and wings white. Flight feathers edged with orange. Breast bar jet black, extending upwards into the zebra lines, causing them to appear rather mottled. The width of the chest bar should be at least half an inch.

Underparts white. Cheek patches orange, extending beyond the normal outline towards the top of the head and behind neck. Facial area white with no tear mark. Flank markings chestnut with elongated white slashes instead of round spots. Tail predominantly white with grey vertical lines joined in a loop at the end of the tail. Beak red, legs and feet orange.

HEN: As for the cock minus breast bar, throat markings, flank markings, and cheek patches. Throat, chest and underparts white.

Show faults: Markings on cocks too pale. Lacing not showing on especially cocks flight feathers. Horizontal bars on tail. Greater than 50% white in flank markings on cocks. Cheek markings on cocks not extending beyond normal boundaries.

NB: Blackbreasted English CFW hens can be confused with White hens because of the lack of tear marks. However the Blackbreasted clearly show the characteristic vertical stripped grey and white tail barring.

ORANGEBREASTED NORMAL

COCK: Eyes dark Head neck and wings grey. Throat and upper chest pale grey with orange zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar orange. Underparts off-white Cheek patches orange. Flank markings chestnut with even, round white spots. Tail orange with horizontal white barring. Beak red, legs and feet orange.

HEN: As for the cock, minus the breast barring, cheek patches, throat and flank markings. Tear mark absent. Cheek patches lighter grey than head colour.

Show faults: Observable tear marks on cock or hen. Incomplete replacement of black in zebra markings, chest bar and tail (ideal is zero black).

ORANGEBREASTED FAWN

COCK: Eyes dark. Head neck and wings warm fawn. Throat and upper chest light fawn with orange zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar orange. Underparts creamy white. Cheek patches orange. Flank markings chestnut with even, round white spots. Tail orange with white barring. Beak red, legs and feet orange.

HEN: As for the cock, minus the breast barring, cheek patches, throat and flank markings. Tear mark absent. Cheek patches paler fawn than head colour.

Show faults: Observable tear marks on cock or hen. Incomplete replacement of deep brown in zebra markings, breast bar, and tail (ideal is no deep brown markings in these areas).

ORANGEBREASTED PIED

COCK: As for the Orangebreasted Normal, Fawn, etc., but with the body colour broken with white, approximately 50%. Well matched pairs are

acceptable in the range 40-60%. Cocks to retain all cock markings, but broken with white. Beak red, legs and feet orange.

HEN: As for the Orangebreasted Normal, Fawn, etc., with all areas of the bird broken with white.

Show faults: Poor matching of pairs and unevenness of white areas. Loss of markings, especially on cocks.

ORANGEBREASTED LIGHTBACK

COCK: Eyes dark. Head, neck and wings silvery grey. Throat and upper chest pale grey with orange zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar orange. Underparts white. Cheek patches orange (may be darker where the tear mark would normally be). Flank markings chestnut with even, round white spots. Tail orange with horizontal white barring. Beak red, legs and feet orange.

HEN: As for cock minus the breast barring, cheek patches, throat and flank markings. Tear mark absent. Cheek patches lighter grey than head colour.

Show faults: Observable tear marks on hens. Incomplete replacement of black in zebra markings, chest bar and tail (ideal is zero black)

ORANGEBREASTED CHESTNUT FLANKED WHITE

COCK: Eyes dark. Head, neck and wings white. Throat and upper chest white with orange zebra lines running across the throat under the beak, continuing down to the chest bar. Chest bar orange. Underparts white. Cheek patches orange. Flank markings chestnut with even, round white spots. Tail orange and white horizontal bars. Beak red, legs and feet orange.

HEN: No tear mark or cock markings. Tail should be barred horizontally with orange and white.

Show faults: Observable tear marks on cock or hen. Incomplete replacement of black in zebra markings, chest bar, and tail (ideal is zero black or grey)

FAWN ISABEL

COCK: Eyes dark, head and neck light cream, back and wings also light cream, but may be a little darker than the head. Tear marking absent, Area between cheek patches and beak white. Throat and breast greyish cream with no chest bar or zebra lines. Underparts cream, of a darker shade than the head neck and wings. Cheek patches well defined and dark orange, with no dilution. Flank markings chestnut, with even round white spots. Tail cream with lighter horizontal bars. Beak red, legs and feet orange.

HEN: As for cock, minus flank markings and cheek patches. Throat should be cream.

Show faults: Tear marks. Breast bar and clear zebra lines on throat of cocks. Excessive orange margins on wing feathers. Dilution of flank and cheek patches on cocks.

BLACKBREASTED ISABEL (PHAEO)

COCK: Eyes dark, neck, back, and wing feathers light cream. Flight and wing feathers must have an orange edge. Tear marking absent. Area between cheek patches and beak cream.

Chest bar and throat markings absent. Underparts from throat to vent, cream, darker towards vent. Cheek patches orange, spreading over the top of the head and upper neck. Flank markings chestnut with white elongated spots. Tail feathers shades of cream with bars on the upper tail feathers to run longitudinally. Beak red, legs and feet orange.

HEN: As for cock minus flank markings and extended cheek patches. Head, neck, back and wings should be light cream, with darker cream edges to the wing feathers, and underparts darker cream.

Show faults: Insufficient spreading of cheek patches and lack of colour on flanks of cocks. Chest bar and zebra lines on cocks. Horizontal tail bars.

ORANGEBREASTED BLACKBREASTED ISABEL (OB PHAEO)

COCK: Eyes dark. Neck, back, and wing feathers light cream. Flight and wing feathers must have orange edges. Tear marking absent. Area between cheek patches and beak marking cream, beak marking orange. Chest bar to beak solid orange. Underparts white near chest, grading to cream near the vent, with orange lines. Upper rump warm cream with orange lines. Cheek patches deep orange, flowing over the head and neck to give an almost orange head. Flank markings chestnut with white elongated spots. Tail feathers shades of cream, with bars on the upper tail feathers showing longitudinal white and cream bars edged with orange. Beak red, legs and feet orange.

HEN: As for cock minus breast and flank markings, beak marking, and extended cheek patches. However the cheek patches and flanks should be a warm shade of cream. Head neck and wings should be light cream, with darker cream or slight orange edges to the wing feathers. Underparts from beak to vent, light cream on the chest, shading to darker cream near the vent. Upper rump of a warm cream shade.

Show faults: Orange breast and cheek patches not solid or sufficiently extended. Lack of other characteristic markings. Flank markings on cocks not containing sufficient colour due to too much white markings. No flank or cheek patch on hen. Horizontal tail bars.

ORANGEBREASTED ISABEL

COCK: Eyes dark. Head, neck and wings light cream. Flight feathers edged with orange lacing. Tear marks absent. Facial area between beak and cheek patches white. Throat and upper chest cream, with deep orange chest bar and zebra lines running from cheek to cheek. Underparts dark cream, darker than the back and wings. Cheek patches deep orange and well defined. Flanks chestnut with even, round white spots. Tail orange with horizontal white bars. Beak red, legs and feet orange.

HEN: As for cock, except without the breast bar, zebra lines, flank markings and orange cheek patches. Should have orange tail with white bars, in which it differs from the Fawn Isabel hen.

Show faults: Markings on cocks not full coloured. Tail lacking orange, and tear marks on both cocks and hens.

GREYCHEEK

COCK: Eyes dark. Head, neck and wings white. Throat and upper chest grey with darker grey zebra lines running across the throat from the chest bar up to the beak. Chest bar dark grey.

Underparts cream. Cheek patches should be full, and as grey as possible. Tear marks dark grey, matching chest bar. Flank markings grey orange with even, round white spots. Upper tail feathers cream with no barring. Beak red, legs and feet orange.

HEN: As for the cock, minus the chest barring, and flank markings. Flanks should be dark cream, and the throat should be silver grey. Cheek patches should be as grey and as full as possible.

Show faults: Excessive orange in the cheek patches and flank markings of the cock, incomplete cheek patch of hens. Excessive grey shading on the head neck and wings in either sex.

A.O.C.

In the interest of breeders and exhibitors no new colour will be recognised until thoroughly investigated by the Zebra Finch Society.

PAIR SELECTION

The task of pairing together Zebra Finches should not be done purely on a random basis. For the breeder who is trying to produce birds of a particular colour or mutation, the principles involved are fairly straight forward and a copy of the matings list published by the Z.F.S. will usually be of great assistance. Where the aim is to produce exhibition birds, the task of choosing the right breeding partners is much less predictable.

Making the best possible pairings from the stock available is not just a problem for the beginner, even the most experienced fanciers will devote a great deal of time and effort in trying to select the right matings. This they do largely by practical experience, something which cannot be gained 'overnight'. For the beginner the first step is to try and recognise the shape of bird which is recognised within Zebra Finch circles as being the 'ideal'. Shape is usually referred to as 'type', and our standards tell us to look for birds of cobby type, which give the birds a look of substance. This is to say the birds should be full bodied and well rounded, the tail should be carried at a natural angle, being neither droopy nor carried at too high an angle, i.e. Robin tailed. Neat wing carriage is also important, birds with dropped wings or crossed wings are not desirable. When assessing the type of birds it is important not only to look at the birds in profile, they should also be viewed 'face on' to assess their width, wide birds tend to be cobby. Very few fanciers have the luxury of starting with a shed full of birds of good type. We all have to start with less than ideal stock. Always try to avoid pairing birds together which show the same fault, as this will 'fix' the undesirable characteristic in the youngsters produced.

Having considered type, the next things to examine are the markings of the birds available. Hens which show cock markings such as traces of breast

barring, ghost cheek patches and ghost flank spots are seriously faulted and should only be used sparingly, if at all, as breeding stock. Cock birds which have clear and distinct markings with definite edges are to be preferred. Those with poor breast bars, irregular flank spots or smudgy cheek patches should only be used on a very limited basis. Remember faults shown by parent birds are often passed on to their youngsters, perhaps not visually, but hidden within their genetic make up.

Type and markings having been assessed, fanciers should turn their attention to the colour of the birds to be used; those which are patchy should be avoided where possible. However, there are so many factors to consider with regard to colour, beginners might be wise to consult a more experienced breeder, in order to determine the full potential of their birds. Breeders should also be aware that birds generally have one of two feather types. Yellow feather tends to be fine and hard, whereas buff feather is larger, softer and coarser, making the birds appear bigger. Buffs can be bred from yellows, but yellows cannot be bred from buffes, it is essential to use birds of the yellow feather type once in a while to maintain the quality of feather in your stock. Once again practical experience is essential in order to master the finer points of feather texture and quality.

In addition to assessing birds visually, their relationship to one another must be considered. A great deal is written about In-breeding and Line breeding, and while these techniques may produce short term success when using top quality birds, they will more often produce freaks and throw-backs. If you hope to breed exhibition quality birds, do not mate brothers to sisters, fathers to daughters, mothers to sons, or half brothers to half sisters, when first building up a stud. Once you have made some progress and gained more experience you can decide whether you are prepared to stake your stud on 'one throw of the dice'. If you need a six to win, remember it is very unlikely that there will be a six on your 'dice' when you first start in the fancy. Be patient and try to make progress gradually.

The beginner often wonders if there is a special combination of colours which will always produce good results. There is not. Generally Dominant Creams are mated to Fawns and Dominant Silvers to Normals. Pies are only mated to Pies or to Whites. Normal X Normal, Normal X Fawn, Normal X Light Back, Normal X Chestnut Flanked White, Fawn X Fawn, Light Back X Light Back, Light Back X Chestnut Flanked White, Chestnut Flanked White X Chestnut Flanked White, White X White and Penguin X Penguin, are matings which are quite commonly used. When first starting try to pair birds of the same colour together, as this will give a better chance of breeding cocks and hens of the same colour, thus enabling you to bench matched pairs.

For the beginner the rule tends to be to pair your best cock to the best hen available remembering not to use closely related birds as breeding partners. Then mate the second best cock to next best hen available, until you have made all the required pairings. Concentrate on breeding birds from your better

pairings, even if this means using your poorer birds as foster parents, this will give you the best possible chance of using your birds to the best potential. However when attempting to breed exhibition birds the first thing which becomes clear is that the more you learn, the less you seem to know. Most successful Novices have far more confidence in selecting pairs than do seasoned Champions, but this is because most Novices have not experienced the set backs which inevitably occur just when you thought it was all plain sailing.

FEATHER TYPE

After breeders have been keeping birds for two or three years it should become apparent that different individual birds have different types of feather. Some have quite fine feathering which carries good rich colour, while other birds have coarser plumage which carries less colour. Those birds with fine feather are usually referred to as being Yellows, while those with the coarser feather are called Buffs. Although most Yellows have better colour they are often lacking in apparent shape and size. The birds with the coarser feather tend to display better type and consequently appear bigger.

Exhibitors and judges usually tend to favour Buff feathered birds, as they are more likely to show the desired shape, however it is important for breeders not to neglect their Yellow feathered birds. Of the two feather types Yellow is genetically dominant over Buff, but most Yellows are actually carrying the Buff feather type hidden in their genetic make up. Pairing two Yellows together usually produces 25% pure Yellow feathered birds, 50% Yellow split for Buff feathered birds and 25% Buff feathered birds. There should be no visual difference between pure Yellow and Yellows which are split for Buff. As Buff is genetically recessive, pairing two Buffs together will result in only Buffs being produced. Pairing a Yellow split for Buff to a Buff should produce 50% Yellow split for Buff and 50% Buff. Anyone who selects their breeding stock purely on the type and shape can unwittingly end up with nothing but Buff feathered birds, this means they cannot produce Yellow feathered birds. Pairing Buff to Buff is a technique employed in many branches of the fancy and is known as Double Buffing. Such pairings can often produce good results especially in the short term. However Double Buffing cannot be undertaken indefinitely without having a detrimental effect on the birds produced. Various faults are associated with Double Buffing, feather lumps being the most notorious, however these are not generally associated with Zebra Finches at the present time. What usually occurs in Zebras is that the birds produced tend to lose their 'style', often appearing to be loose feathered and lacking good condition. This lack of 'style' is usually followed by a reduction in overall size and a general lack of vigour. Using Yellow feathered birds on a regular basis can help to restore the 'style' of the birds produced and maintain the desired quality for exhibition birds.

The main problem beginners in the Zebra Finch fancy encounter is trying to determine which birds are Buffs and which are Yellows. This can often be best achieved by handling your birds. All the young produced from a particular pair should be placed together in a stock cage and examined visually. A note should be made of those which appear to be largest, then each bird should be caught and handled. Those which feel larger and look larger are probably Buffs, those which appear to lack size but feel quite large are likely to be Yellows and those which appear small and feel small will in all probability be of little use for breeding exhibition stock. This process should be repeated with all the young produced from each individual pair used during the breeding season. A note should be made of those birds which 'felt' bigger than they looked and the best of these should be retained as possible breeding stock.

Breeders will usually try to make a number of Buff X Buff pairings and also some Buff X Yellow pairing, it does not really matter whether the Cock or the Hen is the Buff, but experienced fanciers often feel the best results are obtained from a Yellow Cock of good shape mated to a large Buff Hen. When selecting future pairings always try to use Buffs which have been produced from Yellow X Buff pairings for your Buff to Buff matings and Buffs which have been produced from Buff X Buff matings for your Yellow X Buff pairings. A Buff produced from Yellow X Buff pairings will usually be referred to as Yellow Bred and breeder should try to introduce Yellows or at the very least Yellow Bred birds into their pairings at least once every three years.

The different colours of Zebra Finches also have a modifying effect on the feather type produced. Fawns often produce a Super Buff type of feather, which is one of the reasons they are so successful on the show bench. Normals rarely produce this type of feather, although one or two individuals have been seen over the years. Dominant and Recessive Dilutes tend to produce a softer feather which can help to improve the apparent quality of the feather. This apparent softening is probably associated with the reduction of black pigment in the plumage. Good type Chestnut Flanked Whites can be bred from Buff X Buff pairings but this is often detrimental to the apparent colour. Therefore it is important to try and use Yellow X Buff pairings more often with Chestnut Flanked Whites than is usual with Fawns. Pies and Whites are both capable of having Super Buff feathering but one should never be tempted to use these colours in an attempt to improve non-pied varieties.

So far little has been said of feather quality, but this is another factor to be taken into account when selecting breeding pairs. Birds with poor feather quality will often seem to lack condition, one of the best ways of ensuring you produce a stud which has good feather quality is to pay particular attention to the wings and tails of the birds you intend to retain for breeding purposes. Birds with untidy wings or thick lumpy tails have poor feather quality, and while poor feather quality is more often associated with Buffs, it can also occur in Yellow feathered birds. Always try and use birds in your breeding team which have neat tightly folded wings and neat compact tails.

It is most likely that breeders of Fawns and Dominant Creams will experience the most serious problems with the excessive use of Buff feathered birds. Breeders of other colours, such as Chestnut Flanked Whites could get themselves in the same position, but the continual quest for good colour often prevents this state of affairs arising. Where breeders find they have lost feather quality due to the use of too many Buff feathered birds, and they do not have any Yellows to try and rectify the situation, the best alternative can be the use of Normals.

Normals tend to have a modifying effect on all excesses produced within the other colours. While using a Normal is not exactly the same as using Yellow feathered birds, it can be helpful, and Fawn Hens produced from Normal/Fawn Cocks mated to Normal Hens, often show the desired feather qualities which are lacking in studs where too many Buff X Buff pairings have been used. It should be remembered however that remedial action is not instant and it may take several years of careful breeding to produce youngsters of the desired feathering.

The more time you spend looking at your birds and the longer you remain in the fancy, the easier it will be for you to recognise feather type and good feather quality, so that this becomes second nature when you select the birds you intend to retain as breeding stock. If you pay no attention to feather type and feather quality, then it will be very difficult for you to maintain a good stud of birds on a long term basis.

BREEDING ZEBRA FINCHES

Cage Size

Cage breeding is the accepted norm for those wishing to breed exhibition Zebra Finches. By breeding one pair to a cage the pedigree of any prodigy is assured, as long as cocks and hens have been kept apart prior to the breeding season. The average size for a single breeding cage would be 24" wide x 16" high x 12" deep. Foreign finch or Budgerigar cage fronts can be used. The one designed for Budgerigars has the advantage of a larger door than those designed for foreign finches, thus making it possible to remove the nest box at any time during breeding i.e. for inspection of nest contents or for ringing chicks.

Nest Box

Nest boxes 4½" x 4½" x 4½" with hinged lids for easy access are most popular. The front should be reduced to 4½" x 3" – leaving an opening 1½" high for entry. Wooden nest boxes are usually used and need to be fixed securely (preferably in a fairly high position) in their breeding cage while at the same time being detachable for easy inspection. The best way of doing this is to fix a screw into the back or side of the cage and then drill a hole slightly larger than the screw head in the corresponding place in the nest box. When the screw is correctly located the nest box will fit in place without falling off. The nest box should be introduced a few days after the pair is put together.

Nesting material

A suitable nesting material is clean dry grass, or hay i.e. free of damp and dust. To ensure a correct base for the nest, fill the nest box with hay and make a cup shape in it by pushing the fist into the centre. A useful addition is to line this cup shape with a little fine soft hay after fixing the nest box in the breeding cage. Allow a little additional nesting material to be left in the cage, such as fine soft hay, sufficient for the Zebras to complete the nest.

The birds will appreciate other materials such as: soft dried moss, clean soft feathers or branded nesting material if any of these can be made available in small quantities. After the first egg is laid remove all spare material.

When to breed

Zebra Finches kept in flights will breed as and when they attain breeding fitness. Birds kept in outside flights should be discouraged from breeding outside of Spring and Summer, and this is best done by not supplying nest boxes other than during periods of good weather.

Cage breeding in a controlled environment can be done at will, the majority of exhibitors pair their birds between Christmas and March, but of course steps have to be taken to bring the birds into breeding condition artificially, for an early start.

Breeding conditions

Birds kept for any length of time in small cages generally gain weight and through lack of serious exercise are not as fit as they need to be if they are to breed well. Therefore before attempting to breed a period of around six weeks is required when they should be conditioned to achieve breeding fitness. At the beginning of the six week period cocks and hens should be separated and housed in flights or long flight cages, this will provide exercise, helping to tone muscles and remove excess fat. The main addition to the diet at this stage should be the supply of cod liver oil mixed at the seed ratio of one teaspoonful to the pound. This should be fed for three days at a time followed by three days without, by alternating in this way any mineral and vitamin intake is gradual. This regime should be undertaken for a period of six weeks, returning to a

normal seed diet one week before pairing up. Only make enough cod liver oil – seed for each three day period at a time and wash all containers out after use. Also ensure that both grit and cuttlefish bone are available at all times.

Obviously if you intend breeding during the winter months electric lighting should be provided allowing a period of at least ten hours a day for feeding. Heating is not an essential although temperatures in the bird room should not fall below 45°F during breeding. Having followed this method of condition your birds should be ready for breeding.

Pairing up

Having attained breeding condition the cock and hen should be introduced to the breeding cage. Normal behaviour at this stage will see the cock puffing himself up, singing and dancing to attract the hen. The hen, for her part, will be swaying from side to side and fanning her tail. If both birds are ready, mating will take place almost immediately.

Failure to accept nestbox

From time to time some pairs will not seem to accept the nestbox provided. The first thing to do is remove the lid of the nestbox. This in itself may encourage entrance to the box. Failing this re-position into a different part of the cage, even trying the bottom corner on the cage floor as a last resort. If the birds still fail to enter the box, split them up and re-pair at a later stage.

Failure to lay

If the birds are fit when paired the first egg should appear a week later. If after three weeks no eggs have been laid, split the pair up and re-pair at a later date, as this would indicate that either the birds are not fit or they are not compatible.

Infertile eggs

Fertile eggs can be detected at an early stage (around five days). Initially blood vessels can be detected and over an incubation period the eggs will change colour slightly. If the eggs are infertile, remove them and allow the pair to lay again. You will usually find that the next clutch will be fertile.

Fertile eggs failing to hatch

From time to time eggs that appear to be fertile fail to hatch. There can be many reasons for this, the most common being the fact that the birds may have been scared off the nest for an excessive period of time and the eggs have become chilled. Therefore take steps to ensure as little disturbance as possible occurs, even to the extent that car headlights cannot shine directly into the bird room at night. It is also possible that young pairs have not turned the eggs correctly; this is usually self correcting in future clutches. Humidity levels in the bird room can also be a factor in non hatching. If heating is used during winter, leave a small bowl of water in the shed to compensate for any drying out in the atmosphere.

Rearing

Zebra Finches are generally good parents, provided they have the correct tools for the job. At all times during the breeding season, in addition to the normal seed diet, rearing / softfood should be offered. This could be one of the commercially available options or wheat germ bread mixed to a crumbly consistency with milk, both are used with success.

Zebra Finches can lay between four to eight eggs. The average clutch is five eggs. Eggs normally start to hatch after an incubation period of 12 days. (Incubation normally starts on the day the third egg is laid).

Zebra Finches may be close rung with Z.F.S. rings – usually when they are between eight and ten days old. A separate fact sheet has been prepared on this subject but if you are not sure of ringing your first chicks, then please ask an experienced fancier to help you.

Young Zebras leave the nest box when they are about three weeks old.

Generally chicks are self feeding between 28 and 36 days old, and if they are observed feeding from the seed pots, can be taken away from their parents and placed in stock cages. Points to watch out for around the time for separation are when you notice the colour of the young birds beak begin to change colour. In young Normals for example, the beak colour will start to change from black to red.

Failure to feed

As the chicks hatch they will not usually be fed for the first twelve hours as they will still be supplied from the residue of the egg sac. However sometimes pairs will not start feeding at the correct time and chicks may die. If this happens, the best remedy is to place a chick a few days older from another nest, into the nest that the problem is occurring in. The fact that the older chick is noisier and more vociferous in its quest for food may stimulate the parents into feeding. After a couple of days the newcomer can be returned to its original nest.

Ejection of chicks

Some pairs will from time to time start throwing chicks from the nest; the cause could be over fit birds wanting to start breeding all over again. In some cases the introduction of an older youngster may help but usually the best course of action is to foster any surviving chicks under pairs with youngsters of a similar age.

Attacks on fledglings

The period from the chicks leaving the nest to being fully self-sufficient is the time when on rare occasions they can be attacked by one or both of the parents as they attempt to go back to the nest before the chicks are weaned. If this problem occurs and it looks as though the chicks are endangered, remove the hen, leaving the cock to feed the chicks through the weaning period, which he should do without any problems.

DIET

Zebra Finches will only breed when they are fit and in 'Breeding Condition'. It is important that you bring them into breeding condition and build up their stamina to enable them to carry out the strenuous task of raising one, or two, nests of youngsters.

Basic Seed Requirement

Throughout the breeding season, a good Foreign Finch Mixture is quite acceptable to feed your birds on. However, it is a good idea to provide one, or two, containers to hold a particular seed. It is a fact that cage birds change their seed diet from time to time and by adopting this method, you will get a clear indication of what your stock prefers. For example, one container of Panicum Millet and one container of Foreign Finch seed would be a good choice.

Most breeders like to provide a supplement to their stocks basic diet.

Conditioning seed is top of the list and is widely used as a pre-breeding season conditioner. It may be offered twice weekly, starting at least six weeks prior to the birds being paired up for breeding.

Rearing Food

It is generally accepted that all Zebra Finch Breeders use a rearing food. Trade products are the most popular but those who have the time to spare, prefer to make up their own recipe. A general 'Condition and Rearing' egg food is widely used but other brand names such as CEDE, EMP and PTX are also popular. The majority of these products are a dried egg and biscuit mixture to which you just add water and mix it up. Ideally, a moist, crumbly consistency should be given - do not make it too wet, Zebras will not eat it!

Of the rearing food you may prepare yourself, the easiest to make is bread and milk. Brown wholemeal is best, but white bread will be accepted. Mix with warm milk, a sprinkling of sugar may be added too. Caution must be observed in the summer months, as the milk may turn sour. Do not leave it in the breeding cage too long if it is not eaten straight away.

Soaked seed is occasionally used as a Rearing Food. Mixed Millet may be soaked in water for up to 48 hours, but water must be changed every 24 hours to keep the seed clean and fresh. The water may stagnate. Before feeding thoroughly rinse with clean water. It can be fed on its own, mixed with egg food, or even left for the seed to sprout. Millet Spray may also be prepared and given in the same way.

Green Food

Zebra Finch enthusiasts like to give their birds some form of green food. However, not necessarily as a rearing food. Chickweed is the popular choice with Lettuce a close second. It must be remembered that whatever green food you use, it must come from a contaminated free source.

Tit Bits

The majority of Zebra Finch breeders do not give their birds tit bits. You may give your birds the occasional treat, apple is top of the list but orange is accepted too. Tonic Seed or ground Digestive Biscuit may also be given.

Mineral Supplements

Mineral grit is an essential part of a Zebra Finches diet. Other alternatives or additions are Cuttlefish Bone (whole or crushed), Baked Hens Eggs, Fine Oyster Shell Grit, Charcoal, Iodised Blocks or Limestone. A good supply of Calcium is necessary for good egg production. A lack of Calcium may result in soft shelled eggs.

Vitamin Supplements

Vitamin Supplements are used extensively in Aviculture. There are many commercial products on the market and are available in solid, liquid and

powder forms. Why do we use them and do they benefit our birds ? A recent survey indicated that 45% of breeders used a 'Vitamin Supplement'. The name of the product, or how it was administered was not asked. It is generally accepted they are used as a pre-breeding fitness and stamina builder, or as a means of maintaining a healthy bird.

Of course, it is always difficult to determine what dosage to administer and if the supplement benefits the birds. The end result is a personal conclusion - if you believe your method and results are successful when using a vitamin supplement - then by all means stick with it. If not, then perhaps a change may be necessary. It's your decision.

More natural additives may be used. A hard boiled hens egg may be mixed into your rearing food to give extra nourishment. Wheat Germ is another natural way of providing extra protein, minerals and vitamins. A table spoon full mixed in with your egg food is a good measure. You may also use a teaspoon of honey, melted in warm water and mixed in your egg food; this is another natural source of goodness.

Drinking Water

Drinking water is the way you administer liquid supplements, such as Abidec, but some properties are lost by adding water. It is essential you follow the manufacturers directions when measuring the dosage. If you use Abidec, for example, administer twice weekly as a pre-breeding season supplement, but water must be changed 24 hours after use.

As far as Zebra Finches are concerned, fresh water should be given daily.

Bathing water too, should be replenished every day. The use of tap water is a very debatable point. In most cases it is a matter of convenience. Some people prefer to boil tap water and leave it to cool before giving it to their birds.

Boiling eliminated impurities contained in tap water.

Whatever feeding methods you employ during the breeding season, it is very important you stick to the system throughout the season. A change of seed, or routine may have an adverse effect on your birds and their breeding results. At the end of the day it becomes a matter of experience in what feeding method you use, and of course the time you have available. Proper care and attention of your birds feeding requirements will undoubtedly bring its rewards.

BASIC GENETICS

Although knowledge of the inheritance of colours in Zebra Finches is not essential to be a successful breeder and exhibitor, a basic knowledge of the subject can be of assistance. Sometimes colours are bred unexpectedly and usually the reasons for these cropping up can be determined from a few basic matings. Equally we do not

always have exactly the right birds at the start of each breeding season, with a little basic knowledge of genetics we can often work out the best way to pair together birds of different colours, in order to produce youngsters to be used usefully in future years.

Genetically pure birds are those which only produce genes for their own visual colour, split birds produce genes for their visual colour and also genes for other colour forms which are masked within their genetic makeup. When a bird is pure, i.e. a pure Normal, it is written as Normal. When a bird is split i.e. a Normal split for Pied, it is written as Normal / Pied. For the purposes of this list of matings, colours can be regarded as either Recessive, Dominant or Sex Linked, these terms referring to their relationship to the Normal colour form.

Pieds, Whites, Penguins, Recessive Dilutes and Yellow-Beaks are Recessive Colours.
 Dominant Dilutes are Dominant Colours.
 Fawns, Light Backs and Chestnut Flanked Whites are Sex Linked Colours.

Normal X Recessive Colours (e.g. Pied, which can be substituted by any other Recessive Colour)

Normal	X	Pied	=	100% Normal / Pied
Normal / Pied	X	Pied	=	50% Normal / Pied + 50% Pied
Normal / Pied	X	Normal / Pied	=	25% Normal, 50% Normal / Pied + 25% Pied
Normal / Pied	X	Normal	=	50% Normal + 50% Normal / Pied
Pied	X	Pied	=	100% Pied

Normal X Dominant Silver (Dominant Silvers can be double factors (d.f.) or single factors (s.f.). Regard (d.f.) Silvers as pure Silvers and (s.f.) Silvers as Silver / Normal)

Normal	X	(d.f.) Silver	=	100% (s.f.) Silver
Normal	X	(s.f.) Silver	=	50% Normal + 50% (s.f.) Silver
(s.f.) Silver	X	(s.f.) Silver	=	25% Normal, 50% (s.f.) Silver + 25% (d.f.) Silver
(d.f.) Silver	X	(s.f.) Silver	=	50% (s.f.) Silver + 50% (d.f.) Silver
(d.f.) Silver	X	(d.f.) Silver	=	100% (d.f.) Silver

Double factor Dominant Dilutes are quite rare, the vast majority of Dominant Dilutes are single factor birds.

Normal X Sex Linked (e.g. Fawn which can be substituted by any other sex linked colour)

Normal Cock	X	Fawn Hen	=	50% Normal / Fawn Cocks + 50% Normal Hens
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Normal / Fawn Cock	X	Fawn Hen	=	25% Normal / Fawn Cocks, 50% Fawn Cocks & Hens + 25% Normal Hens
Normal / Fawn Cock	X	Normal Hen	=	25% Normal / Fawn Cocks, 50% Normal Cocks & Hens + 25% Fawn Hens
Fawn Cock	X	Normal Hen	=	50% Normal / Fawn Cocks + 50% Fawn Hens
Fawn Cock	X	Fawn Hen	=	100% Fawn Cocks & Hens

With Sex Linked Colours, the sex of the parent birds used is very important in determining the colours which will be produced. Only cock birds can be split for Sex Linked Colours, visual Normal hens never being split for Fawn, Chestnut Flanked White or Light Back.

From these basic matings we can see that when two Normals are paired together, if they are carrying genes for the appropriate colours, they can produce any of the Recessive Colours and Hens of any of the Sex Linked Colours. Birds can carry more than one colour hidden in their genetic make up and therefore in theory it would be possible for Whites, Penguins, Pies, Recessive Dilutes, Yellow-Beaks, Fawn Hens, and Chestnut Flanked White Hens or Light Back Hens from just one pair of Normals.

When we pair two different colours together the young produced will often revert back to Normal. E.g. A pure Penguin paired to a pure White will only produce visual Normals, these birds being split for both Penguin and White. In present day exhibition stock the vast majority of Whites are White Pies, and as many visual Pies are split for White, when Pies and Whites are mated together Whites and Pies are produced rather than Normals.

White	X	Pied	=	100% Normal / Pied & White
Normal / Pied & White	X	Pied	=	25% Normal / Pied, 25% Normal / Pied & White, 25% Pied + 25% Pied / White
Normal / Pied & White	X	White	=	25% Normal / White, 25% Normal / Pied & White, 25% White + 25% White / Pied
Pied / White	X	Pied / White	=	25% Pied, 50% Pied / White + 25% White Pied
White / Pied	X	White / Pied	=	25% White, 50% White / Pied + 25% White Pied
Pied / White	X	White Pied	=	50% Pied / White + 50% White Pied

With Sex Linked Colours it is slightly different, and as there is a very close

relationship between Chestnut Flanked Whites and Light Backs combining these two colours produces unusual results. The cause of this anomaly is that the Chestnut Flanked White and Light Back genes occur in exactly the same position on the X chromosome.

Fawn Cock	X	CFW Hen	=	50% Normal / Fawn & CFW Cocks + 50% Fawn Hens
CFW Cock	X	Fawn Hen	=	50% Normal / Fawn & CFW Cocks + 50% CFW Hens
Normal / Fawn & CFW Cocks can produce both Fawn & CFW Hens when mated to Normal Hens.				
Light Back Cock	X	CFW Hen	=	Light Back / CFW Cocks + Light Back Hens
CFW Cock	X	Light Back Hen	=	Light Back / CFW Cocks + CFW Hens
Light Back / CFW Cock	X	CFW Hen	=	Light Back / CFW Cocks + CFW Hens
Light Back / CFW Cock	X	Light Back Hen	=	Light Back Cocks, Light Back / CFW Cocks, Light Back Hens + CFW Hens

By mating Sex Linked Colours to Recessive Colours we can produce birds which are split for colours combining the colour characteristics, such as Fawn Pied and Chestnut Flanked White Penguin, by pairing these birds back to the appropriate Recessive Mutation, visual Fawn Pies, Fawn Penguins, Chestnut Flanked White Penguins, Light Back Yellow-Beaks etc. can be produced.

The Dominant Dilute Mutation can also be combined with both Sex Linked and Recessive Colours, when combined with Fawn it produces Creams and multiple combinations such as Dominant Cream Penguin Pies could be produced if desired.

Always remember the percentages of colours produced can vary greatly from nest to nest, and will only correspond to theory if several hundred birds were bred from one pair.

This fact sheet has been produced by :
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