

Eastern District Budgerigar Club Beginners Guide Part 2

Breeding your budgies.

What varieties should I breed?

Simple answer: Whatever you prefer.

However, some varieties are easier to breed than others. Some varieties are more established in the hobby and it is easier (and cheaper) to buy good birds. Also, our club may have some varieties underrepresented in the State teams that you might like to breed.

An illustrated file of varieties can be found at

https://anbc.iinet.net.au/uploads/9/8/7/0/9870161/anbc_pictorial_standard_presentation.pdf

- Some varieties can be **dominant** over others, masking them from the visual appearance of the bird.
- Some varieties form a **co dominance**. Spangles are examples of this.
- Other varieties are **recessive** and will always be hidden if the bird is carrying a corresponding dominant gene.
- Some varieties are **sex linked**. Sex-linked features are carried on the sex determining chromosome. Unlike humans, cock birds carry two, and the hens only one. Hence Sex-Linked hens cannot be split.
- Some varieties form a part of a **multiple allele array** such as Texas clearbodies with the Ino varieties, and Grewing with Clearwings. You need to have the right combination for the variety to be visual on the bird.
- Some varieties are formed by colour enhancing, such as grey and violet.
- Some varieties that mask others perform best when masking certain varieties.

Talk to some of our members that specialise in your preferred varieties for tips on how to breed the best birds.

Appendix 2 has a brief description of breeding outcomes for some varieties.

For a more detailed breeding expectation list go to <http://www.bcv.asn.au/breeding-guides.html>.

Housing budgerigars

Victorian legislation determines standards for cage size and design in Victoria. For details, visit <https://agriculture.vic.gov.au/livestock-and-animals/animal-welfare-victoria/domestic-animals-act/codes-of-practice/code-of-practice-for-the-housing-of-caged-birds>

Practical feeding by Kelwyn Kakoschke

Budgies don't just eat seed! This guide is one approach to providing your birds with a balanced diet.

A good diet will consist of

- Plain Canary Seed 40%, Mixed Millets 50%, Sunflower Seed 5%, Oats/Sprouted or dry 5%. (*Or a good quality preblended mix*)
- Wheat/Sprouted, Mung Beans/Sprouted.

- Silver beet or Spinach, Beetroot, Carrots, Oranges & Apples & Seeding grass.
- Tree branches including fruit trees and eucalyptus.
- Grit, Cuttlefish, Multivitamin solution, Iodised Salt and Cider Vinegar

Feeding management

The seed mixture is as listed. Sunflower seed is supplied in a separate dish in the flights and cages. There is a dramatic rise in sunflower consumption when there are chicks in the nest.

Sprouted seed is composed of a mixture of three parts oats, one part wheat and two parts mung beans. Sprouted seed is given to young developing birds until they are six months old.

Silver beet, or spinach, is fed in large quantities when adults are feeding their young. Beetroot is fed complete to the flights, but not to the show team for obvious reasons. Various fruits are also offered as well as seeding grasses.

Twice per week the birds receive a multivitamin solution. Every two weeks (5mls) of iodised salt is added to a bucket of drinking water and on alternate fortnights, cider vinegar is added for its potassium content and acidity.

Tips for beginners

1. Keep your management system simple to allow you time for knowing your birds.
2. Observe all the small variations in feather qualities, type and temperament in your birds. These areas, when developed, enable you to breed superior exhibition birds.
3. Take care with sprouted seed. They can easily upset the digestion. Ensure the quantity given is consumed quickly and completely.

How do I breed budgerigars?

What do I need to buy?

A basic starter kit will include a suitable cage, a breeding box and another cage for the weaned babies. An established breeder may have 20-50 breeding cages and boxes with a small flight for the babies. Its OK to start small! And its OK to buy second-hand cages.

When is budgie breeding season?

Budgerigars are opportunistic breeders: give them the right climate, accommodation, food and health, and they will breed. In Melbourne, generally late winter/ spring is accepted as the best time to start to breed your budgerigars. Some breeders pair up on the Queen's birthday weekend, so they have chicks for the UBC State Championships in September, however this is not necessary. Many breeders also pair up in late February for an Autumn round of breeding

When are birds ready for breeding?

The minimum age for breeding is 9 months but most breeders wait until hens are at least 12 months old. Hens will have a whitish cere before they mature which becomes a nice even vivid bright brown when ready to breed. Cocks will have a purple coloured cere before they mature which becomes an even brighter blue when ready to mate.

How to start the breeding process.

Pairing up is easy. You just need to find a hen and a cock in good condition with bright cere colour. Watch their behaviour and they will tell you; hens start chewing all sorts of items and cock are always seen chatting up to almost anything.

Clean all your cages prior to breeding and wait for 2 weeks after pairing to open the nest box.

Eggs and hatchlings.

Between 9 and 14 days after the nest box is opened you may see your first egg. The hen will lay an egg every second day, clutches are generally 4- 8 eggs. Eggs generally hatch 17-21 days after the first

egg is laid, but this can depend on whether the hen starts to incubate from the first day of laying as well as other genetic reasons. Refer to the egg chart at in Appendix 1 to help estimate your hatching days.

The chicks will develop down in a week, and permanent feathers will begin to grow in three weeks. Young birds will leave the nest at 4 to 5 weeks old. Any chick that leaves the nest before this should be returned to the box unless they continuously jump out.

Leg Rings

The BCV rings will have your ID code, year and bird number and are required for showing owner bred and rung birds. Put rings on the leg you prefer, usually when chicks are between 7 and 10 days old. It is an easier task if the chick is on the younger side even if you have to replace the ring following day.

There are numerous YouTube videos demonstrating leg ringing techniques. Choose the one that suits you.

What happens when the chicks leave the nest?

Once the young are able to crack seed for themselves, they should be removed from the parents and placed in the young bird cage. This allows them to be protected from the elements longer, while keeping them away from parents that may savage them for staying in the breeding cage to long. The young bird cage should contain plenty of perches and be located near to human activity to allow the chicks to get used to people. Chicks should stay there until they have put on some body substance to withstand the elements and have developed the strength to fly properly.

Leave the chicks with the parents until they are 5-6 weeks old as Dad will keep feeding them and show them how to be independent birds. However, if Mum or Dad are showing aggressiveness towards the chicks remove them early. You may have to hand feed them for a few days while they learn how to fend for themselves.

Generally, they will begin their first moult at about 12 weeks. At this age they are normally placed into your bigger flight with the older budgies or budgies of the same age.

Show Breeding Techniques

When you start talking to breeders about breeding the perfect show bird you will come across phrases like

- Stock birds
- Line Breeding
- Inbreeding
- Outcrossing
- Fixing a feature
- Breeder's name
- Breeder's lines

There are many approaches to developing a stud of show quality birds and you should read around the subject and talk to breeders, or read their web pages, to get an understanding of the various approaches. All have their benefits and pitfalls, some are simpler than others to follow, and eventually you should practice an approach that suits you. Beware of overly inbreeding your birds.

Record keeping

Keeping accurate breeding records is essential for the following reasons.

- Understanding the family relationships of your birds.
- Recognising and removing bad traits that may be showing up in some families.
- Multiplying and maximizing good features.

Appendix 1 contains some breeding templates for you to use or modify.

There are also computer programs available to store your data if you wish.

Breeding room problems

Infertility

Breeding Cycle: Cocks and hens have a period of good and poor condition. In cocks, fertility has been proven to occur about every 11-14 days. If either parent is dull in the cere and not bright in the eyes, pairing will most likely be unsuccessful and infertile eggs the result. We need to recognize the stages of breeding condition of each individual bird and to refrain from putting them in the breeding cage if not yet in condition or in a declining stage of breeding condition. A physical examination to determine the condition of the breeding pair prior to moving them into the breeding cabinet helps to ensure they are ready to breed, as they should feel solid through the chest muscles, and taut stomach muscles on the hen.

Lighting: The short daylight hours and cold conditions that we have in June and July contribute to infertile nests as the birds struggle to maintain energy. They may be brought into breeding activity by the use of artificial lighting (ideally 14hrs) and heating (ideally 20-25c).

Nutrition: When poor quality food with low energy and nutritional content is given, it accentuates stress-related illnesses, also if the vitamin A&D content is low the birds become depressed and inactive and this is possibly one of the most common management faults.

Perches: If round dowelling is used for perches, sometimes the hen is unable to grip the perch when mating. The answer is to use square perches or rough them up with a serrated knife.

Feather obstruction: Coarse feathering around the vent area can sometimes prevent efficient mating. One answer is to pluck the feathers away from the vent area, or trim with scissors.

Disease: Another cause of breeding room failure is when poor hygiene, aviary and food management practices are present, also a "carrier" bird or ill bird is used for breeding.

Breeding birds should have a full complement of wing and tail feathers, if not they may be infected with polyomavirus.

Similarly, birds with feather staining or discharge above the nostrils indicate the likely presence of a Streptococcus infection and should not be allowed to breed.

Careful inspection of the flight and tail feathers for the presence of quill mite, as quill and red mite can be an underlying cause of infertility.

Psittacosis, Mega bacteria, Trichomonas and E. coli are infections that may appear in breeding birds during their first week in the breeding cabinet.

Egg quality: An acceptable fertility level is 4 out of 6 eggs. If you are finding 2 fertile out of 6 throughout the stud you may have some sort of disease, incorrect breeding time or poor nutrition. The issue should be investigated and rectified before continuing to breed those birds.

Soft, thin-shelled, brittle or malformed eggs are usually infertile. Their presence indicates vitamin/mineral deficiencies, fungal or uterus infection.

Soiled eggs are less likely to hatch as they indicate poor brooding technique or an unhealthy nest.

Egg bound hens

A sure indication of egg binding in a hen that is if she is found in the nest box, or on the floor of the cage, in great distress with shortness of breath, a swollen vent and diluted pupils. Egg binding is caused by the oviduct going into a spasm and is common at the start of laying. In mature birds the lack of muscle tone in the muscles of the abdominal wall are another possibility, but most commonly the

inflammation of the oviduct is the cause. Try a calcium supplement and heated cage. If this does not solve the problem naturally then manual manipulation is now necessary.

Dead in shell

Most of the dead-in-shell cases are caused by the natural weakness of the chicks; a diet that includes a high source of vitamin B12 should help this problem. 10% of dead in shell causes can be attributed to a low humidity in hot weather that causes the membrane surrounding the embryo to harden.

Infection can be another cause as bacteria can enter the porous shell of the egg.

Nesting problems

@ 0-3 days

An empty crop and any change in the colour of the skin from its healthy state of rose pink indicate a potential problem in 1-3 day old chicks.

Bluish tinge – indicates circulation problems caused by cold stress, poor feeding or infection.

Red colour- indicates dehydration associated with heat stress or infection.

Pale or white- indicates Polyomavirus.

Yellow belly- signals the failure of a newborn chick to absorb its yolk sac and in most cases indicates that the dead chick was weak before and after it emerged from the egg. Yellow belly may occur in chicks that have been strong at the time of hatching but have died from an overwhelming nest infection that has entered the yolk sac through the open navel.

@ 5-10 days

Wet nest may occur when nestlings are between 10-15 days of age as a result of mineral salt (electrolyte) imbalance occurring in their parents, which induces an excessive thirst after the transition from crop milk to whole seed feeding. The resulting thirst causes parents to feed too much water and not enough solid food to their young so that in a few hours the entire clutch is producing watery droppings.

Widespread deaths in nestlings of this age could indicate toxic death associated with the process of feeding contaminated soaked seed or another food item, as this is the time mothers begin to feed whole seed.

Older than 10 days

Crop bloat or air in the crop is a sign that parental care is failing, this is often the youngest as these are the last to be fed.

Hand feeding

Hand feeding, even a day old chick, is quite easy provided the chick is active and squeaking. Baby milk formula with some added glucose is ideal, older chicks may be fed using a syringe and crop needle.

You can find Crop needle use demonstrations on YouTube, or ask a club member for more information.

Weaning

During the normal weaning process young budgerigars lose up to 25% of their weight. The sudden weight loss associated with weaning becomes hazardous for exhibition budgerigars with a weak weaning instinct, as they may not eat enough and hand feeding may be the alternative to get them over this difficult period.

Recovery period

Energy depletion is nearly always the underlying cause of the sudden death of breeding cocks and hens that often occurs when they are removed directly from the breeding cabinet into the flights without a chance to recuperate, usually 4 or 5 days in a holding cage with energy rich food gives them time to make a full recovery from the hardships of breeding.

Feather plucking

This coincides with the start of a new breeding cycle and is the result of hormone fluctuations when the mother is preparing to produce her next clutch of eggs without the means to mobilize the required amount of protein and minerals. It may also be a vice but irrespective of its cause, feather plucking is a sign the hen is ready for another breeding cycle.

Interpretation of the droppings

The close observation and understanding of the dropping changes in the aviary is very important for health management.

White droppings- Blocked gizzard, cold stress & exposure.

Black (large tarry) droppings – Coccidiosis, severe bacterial and fungal infection, obstructed gizzard in breeding birds, starvation.

Grey-blue (large) droppings – E.coli infection.

Yellow droppings – Severe liver diseases. Psittacosis or salmonella infections

Orange droppings–Severe toxic process in the liver, indicates salmonella infection

Green Droppings (watery)- Feeding greens, or an illness causing increased thirst.

Green (enlarged)-poor quality feed, stress, illness or incorrect medicines

Green (dark with no white urate)- toxic caused by white mold, canker coccidiosis and Psittacosis.

Smelly droppings- E. coli infection occurring with coccidiosis outbreak and often associated with poor quality or wet and/or dirty grit.

Frequently Asked Questions

(1) What do we do with soiled eggs? They may be washed with warm water for a short period making sure the water is slightly warmer than the eggs being cleaned.

(2) What is the ideal nest box material? Most breeders use a readily available small animal bedding or fine wood shavings produced from non-treated timbers.

(3) How do you handle pairs that have had a clear round? Rest the hen for a few weeks and give the cock bird another partner, if he appears in condition, as he should be into the breeding cycle by now.

(4) Which partner do you remove at the completion of breeding? Usually, the hen and let the cock bird raise the babies when they leave the nest.

(5) Are there other causes of dead in shell? Yes, brooding failure results in eggs that die because of improper care during incubation. Cold temperatures and buff feathered hens failing to provide them with adequate insulation as brooding is an energetic process when the eggs must be turned many times each day.

(6) What is the best preventative for red mite in the nest box? Pyrethrum-based spray by Vetafarm, Ivermectin (S76) in drinking water or Limil under the concave.

(7) Do they require any special breeding cage preparation? The nest box and cabinet should be cleaned, and anti-vermin powder used to prevent parasites. Grit and all the usual diet requirements should be provided. The birds should be treated for lice and mites prior to entering the breeding cage. Perches should be secure and not roll.

(8) Can you use foster parents? Foster parents are used when there are too many eggs or chicks for the main breeding pairs to raise, or to raise all of the eggs while the breeding pair rest. They are also security should a parent die, or the chicks be savaged. The fosters should have no bad habits when raising chicks such as feather plucking, savaging, neglecting chicks or laying more eggs with the chicks still in the nest. It is best to allow at maximum 6 eggs in one nest, any more may lead to problems also

raising 3 or 4 chicks per nest is ideal, more is too stressful on the parents and one chick only per nest will often be neglected. Do not be afraid to move eggs and chicks, though it is recommended that you use disposable gloves when handling the eggs as bacteria from your hands can pass into the eggs also ensure your hands are warm when handling small chicks.