

## Splayed Legs

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There have been discussions on the Budgerigar Society Facebook page around the issue of splayed legs in budgerigar hatchlings and many questions posed as to how to overcome this problem in our breeding programmes.

Having also replied to several splayed leg posts on the Budgie Society of New Zealand Inc. Facebook page I think now is as good a time to address the reasons behind splayed legs in our birds. The fact of the matter is, splayed legs in budgerigar chicks are not natural and it means that we as breeders are doing something wrong. For those new to the hobby or those who have yet to have a chick in a nest with splayed legs, I will introduce the concept and the pathophysiology first.

There are two types of splayed legs in budgerigars, the first is a congenital form (acquired before birth) where the chick hatches with mal-positioned legs, having been sitting in the egg in the wrong position. These chicks are unlikely to improve without immediate intervention, and even then, their prognosis is poor. The second type of splayed legs is an acquired form – this is the one that we can prevent (and treat) through better husbandry and management.

Acquired splayed legs are the result of a number of factors, but the end product is a chick whose legs sit in an abnormal position, either splayed out both sides like an airplane's wings or both splayed to the same side, so one leg tucks under the baby's body. Both forms of splayed legs run the risk of further complications – the longer the baby's legs are splayed, the higher the possibility that the baby will develop hip luxation. Hip luxation is where the head of the femur pops out of the pelvic socket and the result is a bird whose legs will never be normal. Therefore, it is critical to correct these babies as early as possible.

### The Causes

So, what causes splayed legs? As I said, it is – more often than not - something that we are doing wrong. The most common cause is an incorrect diet that does not meet the metabolic requirements of the parents and, therefore, the babies. Most often it is attributed to a low calcium level in the diet, but it can also be related to protein levels and any other mineral required for correct bone formation. It is for this reason that feeding a complete diet **long before** the breeding season starts is so important. It is not suitable to start supplementing calcium and soft foods when we pair the birds up, or when the chicks hatch – the fact of the matter is, the nutrition that the hens are able to put into the yolk comes from the diet we feed long before they lay their eggs. Having yolks full of nutrients and energy is going to help with hatchability, as well as having healthy chicks in the nest box.

Hens that sit too tightly early on is something that we can address easily by either placing a block of wood at the edge of our concave or by placing a 20mm marble in the nest which does not allow the chicks to be squashed. Leaving un-hatched eggs in the nest allows newly hatched babies to have something to lean on and will also keep the hen from sitting too tightly. These do, however, end up getting very dirty and should be removed once the chicks are about 10 days old.

Lastly, the easiest way to avoid producing chicks with splayed legs is to have the correct substrate in our nest boxes. Every week I deal with breeders who got tired of refilling the nest with substrate after the hen had cleaned the box out – this is no excuse. Raising chicks on a wooden nest box floor is asking for trouble. Having done all the hard work to pair birds and to have had the eggs hatch, there is no excuse for not having substrate in the nest box. Most hens will forget about cleaning out the substrate once she has laid her first egg. We use pine wood shavings; I know of others who use coconut husks and peat. It is a matter of finding the substrate that works for you and providing it for the chicks to have something to grip on when they are moving around the nest.

### Early Detection

Courtesy of WBO – February 2021

If a chick of yours does develop splayed legs, if it is detected early enough it is easy enough to fix by placing a splint on their legs. There are various methods you can use but the most common is to use soft foam. I like the soft foam method but do find that sometimes the holes become too tight for the growing chick's legs. An alternative to this is a pipe cleaner or wool tied between the chick's legs.

Many breeders utilise their society rings and put a ring on either leg, this allows the legs to be tied together using a pipe cleaner, wool or string without risking making the loops too tight – it is a good idea if you have spare rings!

To repair splayed legs, it is best if the chick is on its back and there are two people as it makes it easier to bind the legs together.

Firstly, wrap the pipe cleaner around one leg just above the ankle and twist the pipe cleaner to make a loop around the ankle, not too tight but not loose enough for the chick to slip its foot out. Then put the legs together to just less than the normal standing position and wrap the pipe cleaner around the other leg making another loop around the ankle, making sure to cut off any excess pipe cleaner.

The splint will need to be left on for anything from a few days or up to three weeks depending on severity and the age of the chick. Remove the splint every few days to see if the chick can walk. If it is ok then leave the splint off and keep an eye on the chick's progress, but if the legs are still splayed then replace the splint.

If splayed legs are not treated early enough then the chick will remain abnormal for the rest of its life. As the chick grows older and develops, its bones calcify, meaning that the bones will have hardened and are no longer soft and pliable and therefore cannot be corrected, so any correction must be done before the chick is two weeks old. Longer, and the treatment is much more complicated and the outcomes less favorable. Although chicks survive and do learn to adapt (with our help) with one splayed leg, having two splayed legs is difficult as it will never perch normally and end up placing a lot of pressure on its internal organs causing pressure sores and illness.

In summary, a great diet, good planning and an attentive breeder means that we can work to make splayed legs a thing of the past – it is a condition which we have the ability as breeders to manage out of our studs and I implore you to take up the challenge next season to try and produce round after round of healthy chicks by providing your adult birds all they need during the off season to produce great youngsters for you during the breeding season.

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**Foam Splints**