The Best Gift for Cage Birds

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For cage birds, it is essential that the particular type of grit used should conform to a definite standard, both chemically and physically. Chemically, it should contain as high a percentage of calcium carbonate and as low a percentage of magnesium carbonate as possible.

Ninety percent calcium carbonate is the least it should contain, care being taken that the magnesium carbonate does not exceed five percent. The organic matter content should also not exceed five percent.

With prolific types of birds, calcium carbonate is the most important single mineral required, mostly for the formation of egg shells which are practically all calcium carbonate.

The most logical thing, therefore, would be to give the birds fresh fowl egg shells. These would also contain important quantities of egg albumen, or even small quantities of egg yolk in some cases.

All birds are distinctly fond of eating the fresh shells of fowl's eggs and the only disadvantage of providing such shells is that this practice may lead to the nasty habit of egg eating among the birds, a habit that should be prevented at any cost, as it spreads rapidly.

Always pulverise egg shells thoroughly

Always pulverise egg shells thoroughly to minimise the danger of the egg eating habit. All egg shells should be finely broken, so as to disguise their identity thoroughly.

But egg shells are generally not plentiful enough in the average home to satisfy the requirements of the birds kept.

In this case, another form of grit will be required and one of the very best is fine sea shell, particularly oyster shell grit, or even both mixed together. But in addition to dry grit, the birds require finely pulverised oyster shell flour in their drinking water, because they cannot get sufficient lime from dry grit only. This applies particularly to prolific breeders like the Budgerigar.

Where egg food or some other artificial food is given, the oyster shell flour is better mixed with the solid food, in the proportion of about two percent. Naturally finely broken shells from fowl eggs may also be mixed with the solid food thus prepared artificially. This will prevent the development of the egg eating vice. One reason why birds develop this habit is because they require something in the egg that is lacking in their staple food. Cannibalism is partly due to the same cause.
Sea shells are composed of organised tissues. These tissues, of course, contain varying quantities of organic matter and small amounts of silica, iron, sodium and potassium, with fair quantities of magnesium, in addition to the large amount of calcium carbonate so urgently required by birds. Iodine is small but sufficient quantities are also present.

Laboratory tests have shown that hydrochloric acid of the same concentration as that naturally found in the gastric juices very soon dissolves the mineral matter of sea shell pulverised finely. Add the whiter or less coloured shell, the sooner and easier does the process take place.

This is where the oyster shell is superior to other kinds of sea shell possessing varying amounts of colouring matter. Even brown egg shells do not digest as readily as the white ones. The colour of the grit prepared from shells is thus of great importance.

**Using cuttlefish bone**

_Cuttlefish bone_ is, of course, another excellent form of lime for birds. In fact, it is the very best in existence, because it is the most readily digested and pulverised. Cuttlefish bone may be pulverised by means of grating or rasping, or with a hammer and the hands.

It must be remembered, however, that the practice of merely hanging up the cuttlefish bone or placing it in the cage in an unbroken state is of little use. Only the pulverised form gives proper results.

The one disadvantage of cuttlebone is that it is often used while still too fresh and rich in organic matter. Only the old or bone-dry substance must be used, after it has lost every trace of offensive smell. The smell is due to the putrefaction of organic matter which often harbours dangerous botulism germs, to say nothing of other harmful organisms.

All fresh cuttlefish bone should be dried in the oven for some time, at a temperature above 100 degrees and below 200 degrees.

_Shingle_, especially when mixed with pure sea shell or oyster shell grit, is another source of lime, and as many fanciers very fondly believe, other minerals in very small quantities.

All grit should be passed through a sieve and used only when as fine as pinheads. Larger particles discourage birds from making freer use of the substance, while the digestibility depends upon the fineness to a very great extent.

Even shingle must not be used unless first made bone dry, to destroy all organic matter. Ordinary air-drying is not enough, for the organic matter will putrefy as soon as the shingle in the case gets wet again, unless this can be prevented somehow.

Oyster shell, which I have been recommending now for many years, is practically 98 per cent calcium carbonate and very readily digested in powder form.

It contains more or less the amount of magnesium required for stimulating the bowels of the bird in a natural way, without causing irritation and diarrhea - as occurs when some limestone rich in magnesia are used.

The chemical composition of oyster shell is the nearest approach to that of natural egg shell. Indeed in many respects the two are practically identical.

Limestone may often contain the highest proportion of calcium carbonate and be more or less free from magnesium salts. Or pure marble may be available, which is also pure calcium carbonate.
The blue or dolomite limestones should never be used, as they contain too much magnesium salts. But even the purest limestone is not nearly as digestible as cuttlefish bone or oyster shell meal.

Then, too, if birds are given the free choice between limestone grit and oyster shell grit, and everything else is equal, they will generally prefer the oyster shell grit.

In addition, to irritating the bowels, magnesium salts also tend to cause urinary calculi, especially when the birds are given rich food.