## Veterinary Viewpoints

Edited by Amy B. Worell, DVM Dipl. ABVP West Hills, California

**Question #1** My veterinarian recommended that my pet lovebird be spayed. He said this was necessary as my bird might die if it becomes egg bound again. Isn't this kind of extreme for a little bird? I thought birds had been laying eggs for millions of years and survived.

M. Tessler, Virginia

**Answer # 1** Reproduction is risk. Caged birds often are on diets deficient in calcium and Vitamin D3. They also have poor muscle tone from lack of exercise. All of this predisposes caged birds to egg binding. The inability to pass an egg is a life-threatening condition needing medical intervention. Recurring egg retention is most serious and requires more extreme measures. Surgical removal of the oviduct isone procedure used in an effort to stop unwanted egg production. The newer gas anesthetics and specialized equipment and instruments have made this procedure much safer for avian patients. Yes, birds have been laying eggs for millions of years and a percent of female birds die each year from retained eggs.

James M. Harris, DVM Oakland, CA

Answer # 2 Spaying or hysterectomy is indeed a major surgery for such a small bird. Only the healthiest birds in the hands of the most skilled surgeons would avoid the inherent serious risk of death with this procedure. If your bird has been laying many eggs, she may be suffering from malnutrition and secondary reproductive problems and hence not be the best candidate

for surgery. On the other hand, if she has laid many eggs, suffers from egg binding, and all other medical attempts have failed, surgery may be her only chance. If this is necessary, insure that your veterinarian has the surgical equipment and skills necessary for such a procedure.

Behavioral modification may also be helpful, such as manipulating objects, birds or people she may be bonded to and decreasing her day length. This will stop reproduction in some birds. Other birds may respond to various hormone therapies which are experimental, not always successful, and may require repetitive injections. Regardless of the method used to control egg laving, all birds with egg binding should be checked for secondary problems and supplemented with vitamins and minerals. Your delemma is, unfortunately, quite common and we all are awaiting results on the use of hormonal treatments to help out these high producers.

Kim Joyner, DVM, MPVM Raleigh, NC

Answer #3 A number of the commonly kept small psittacines, including lovebirds, Cockatiels and Budgies, have a strong tendency to have very strong egg laying urges and may lay excessive numbers of eggs in a pet situation. such appears to be the case with your pet lovebird. Some of these small psittacines lay in excess of 100 eggs per year! Egg laying itself is stressful to a bird and requires that the bird be in good nutritional plane. I find that the vast majority of small psittacines presented with a variety of

egg laying problems, including egg binding, are often on a seed diet which is inherently devoid of the proper elements for a healthy bird, particularly one that is producing eggs. So "spaying" your bird (surgically removing the uterus but not the ovaries, as is commonly done with mammalian pets) is the only definitive solution to the prevention of an egg bound bird. If the bird is in good health and the uterus is small, a good avian veterinarian can properly perform this surgery with a minimum of risk to the bird.

Other alternatives include altering the diet so that the bird is on an adequate nutritional plane. This can be accomplished with the use of one of the commercial pelleted diets, table food, calcium supplementation, and commercially available bean mixtures. Changing the diet puts the bird in a good nutritional level and in itself will not prevent the possibility of egg binding but should decrease its incidence. A variety of hormonal therapies including the use of the human drug HCG have been used with varying success in a number of psittacines.

Amy B. Worell, DVM, ABVP-avian West Hills, CA



**Question # 2** I've always heard from other aviculturists that Eclectus Parrots need more Vitamin A in their diets than do other parrots. Is this true and what happens to them if they do not have enough—and how much is enough?

A. Beringer Oklahoma

Answer # 1 The rumor is that Eclectus species need higher levels of Vitamin A than other parrots. There is no scientific proof of this. Vitamin A is necessary for healthy tissue, especially the lining of the respiratory and digestive tracts. If diets are deficient in Vitamin A, the results are changes in the glands of the lining of the throat and mouth, and a lowering of the body's defenses, thus predisposing the bird to infections. Vitamin A is a very

toxic compound. Many fruits and vegetables have adequate amounts of Vitamin A, as do pelleted foods. Seeds are deficient in Vitamin A. If using vitamin supplements, do not exceed the manufacturer's recommended amounts to use. More is not better.

James M. Harris, DVM Oakland, CA

**Answer # 2** In the wild, Eclectus may eat a lot of fruit and plant material, therefore it is logical to speculate that they may have particular requirements. The Vitamin A requirements for captive Eclectus, however, have not been established. The poor body and feather condition we sometimes find in this species may not be due to Vitamin A deficiencies but to a host of other causes. Those causes remain elusive as apparently healthy, reproductively active Eclectus Parrots have thrived on a variety of diets.

Until we know more, Vitamin A levels would mimic those for domestic species as there has been ample research in these species. Roughly, this translates to 8-10,000 units of Vitamin A per kilogram of dry feed. Studies in poultry that it is safe to feed 10 times this concentration of Vitamin A and chronic toxicity does not occur until 100 times this baseline requirement. If we feel that Eclectus Parrots need more Vitamin A, we can safely supplement with plant sources of Vitamin A as these don't contribute to toxic reactions. Plant sources of Vitamin a occur as precursors and only get converted to Vitamin A when there is a need. Naturally occurring Vitamin A and its precursors are not very stable. Diets containing these items should be stored appropriately and used before deterioration. When cooking food, keep in mind that heat is deadly to vitamins. Pelleted feeds probably contain more stable forms of Vitamin A, but care should be taken when storing these items as well. Be careful of over supplementing Eclectus Parrots with fruits as they may selectively eat only these items to their and their chicks' detriment.

Kim Joyner, DVM, MPVM Raleigh, NC

**Answer #3** I have heard for many years that Eclectus Parrots have a high requirement for Vitamin A in their diet. I have also not seem any documentation of this theoretical requirement in these birds. I have seen Eclectus Parrots in a large variety of both pet and breeder situations, with a varied number of culinary choices available to the birds, and have yet to document a case of Vitamin A deficiency in these birds. So I really do not know where all this started and if, in fact, it is valid. Deficiency of Vitamin A can be manifested in a number of different ways, including respiratory tract infections, poor reproductive success, changes in tissues of the oral cavity (these can be both visible and non-visible to the human eye), and a contributor in a number of skin lesions. Potential causes of Vitamin A deficiency include a diet which is not adequate (and who knows what is actually adequate or necessary in the variety of birds, no less in the variety of psittacines kept in captivity), a decreased absorption of Vitamin A (such as related to a parasitic load in the intestinal tract), and diets that are high in lipids which may prevent the absorption of Vitamin A.

So, what is the bottom line? I would suggest that a balanced diet, comprised of a well-researched pelleted diet in addition to a variety of soft foods, be offered to Eclectus Parrots until such time that research is conducted to prove or disprove this commonly held belief. Any comments that are substantiated by research in a controlled environment are welcome.

Amy B. Worell, DVM, ABVP-Avian West Hills, CA 🖈

## Lear's lifted in the U.K.

uring the last week of November, 1996, a pair of Lear's Macaws and nine other psittacines were stolen from the very secure aviary of Harry Sissen in Northallerton. North Yorkshire. England. The value of the birds has been estimated at 60,000 pounds (U.S. \$90,000).

The raid was carefully planned as the intruders evaded alarms and trip wires while getting to the roof of the aviary and cutting through. As they began putting birds in sacks, a backup alarm system triggered and the thieves escaped to a waiting vehicle. While the thieves made off with just 11 birds. they dropped 60 sacks when they bolted which indicates they probably intended to clean out the aviary.

Mr. Sissen is an international aviculturist known for his expertise breeding rare birds. Indeed, the Lear's Macaws were sent to him after they failed to breed in France and Switzerland. Sissen is the only person in Europe who is licensed to keep Lear's.

The police concluded from footprints they found that one of the intruders was over six feet tall and three of them were under five feetperhaps children. There is a substantial reward offered for the safe return of the birds or for information leading to the arrest and conviction of the thieves.

A spokesman for the North Yorkshire Police suggested that anyone who receives an unexpected parrot for Christmas should call the station. •

