

KEEPING MACAWS AS PETS
By

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Chapter 1: ABOUT MACAWS

INTRODUCTION

This book is meant for you lovers of Macaws. By lovers of Macaws, I mean one who has an easy time with their pet, or simply enjoy owning one. Lovers of Macaws may also fall along several subcategories. There could be a volunteer out there, undertaking Avian studies at any elementary or advanced level, you could gain some practical experience by taking some time to volunteer with a local chapter of conservationists, Government or Research facility. Such would put you miles ahead in practical knowledge of, not only Macaws but the Avian species in general. Should you also be a specialist veterinarian or even one running your own venture with Macaws, this book serves as a quick refresher of both the daily and long term specks of being at the top of your business. By the way, knowledge never grows old.

From another perspective, this book is meant for one who purely hates birds, or say pets in general. A point for those, before you put pointing finger to your neighbour who owns a Macaw or two, sounds wise to take some time to learn the notes behind Macaws. You too could fall in love with Macaws and perhaps this book might have just the right information to convince you, beyond reasonable doubt to Just Own One.

As our world is full of surprises, many students do not know their future opportunities. As such, whenever you have some free time, take this book off the shelf and make a point to digest the nitty gritty in it. Undoubtedly, by closing the last

chapter, you can never be the same student as you were at the very first page of the same. I mean, at least whether you are a physics guru, nature stands constant, at least you must have captured the gestation period of a Macaw or even its average weight at maturity. Sounds interesting, doesn't it?

Rather interesting enough, you could come across an ailing Macaw and be able to tell from a glance that it needs your helping hand. Funny though that birds and majority of animals talk in their own dialects.

You could also discover your passion by rescuing an abandoned bird(or several at a go), and as such, be in great need for a reference book to give you handy tips on how to go about the whole issue.

OVERVIEW:

In this book we have a set of objectives to be addressed for You the Macaw Lover, aspiring conservationist or even the one who happens to discover a passion for Macaws accidentally.

This Chapter gives an overview of the arrangement in Chapters, wherein each chapter cumulatively builds the readers to its climax

The second Chapter guides the reader to the distinct features of a Macaw as compared to the other species within the Avian category. As a reader, you may also wonder, why go for a Macaw when I can keep a smaller bird? The chapter gives some facts for macaws and delves deeper into their interactions with Humans. Therein we get to see the abilities, intelligence, personalities and not to forget how communicative Macaws can be. For the reader, Keeping a Macaw, either for a Hobby, or a professional business, we review some key issues concerning the general legal requirements as well as few cases of judicial presence, just to keep you in the know.

In chapter 3, Just like any other business, Macaws require a specific environment to thrive in. This goes through the cage set up, the interactions of a Macaws to a stranger or even your kids. We do not want you to have one that is a real threat

to your very next generation. Although many people will not share outright, pets have cost. A great pet, and a Macaw in this case will require veterinary checkups, clean cages, secure Aviary and so forth. In a nutshell we want to look at the probable cost, both fixed and variable for hosting your pet adequately.

From Chapter 4, Should you have a nerve like where do I get a Macaw right now, tomorrow or so, This chapter should guide you where or how to get one. Having fallen in love with Macaws and want to run a full time business from the, You may refer to our chapter for how to breed Macaws, right at your home. Do we have some hybrids of Macaws? Seek the same from this chapter.

From the fifth chapter, just as a food is a basic need for all Humans, so it is for Macaws. In the chapter, we explore when and how to feed your Macaws. Should you love your pet(s) enough to retain them on Commercial feed formulations, or should we still be passionate enough to do every meal for our Macaw? This Chapter explores probable options. As a matter of fact, food poisoning affects animals and birds too> so we have to be careful to only give intoxicated feeds to our expensive macaws. This Chapter shares some tips on that too.

Can you tell happy Macaw, can you tell if Macaw is well? This 6th chapter explores. And again, just as health is key for Human, so it should be for the Pets too. It is worth to note that Macaws will at one time suffer from an condition or two. But how do we keep the Vermin's, parasites and germs at bay. Further to the same, a few first aid tips, finding a good vet for your Macaws or even just how do we approach an abandoned Macaw? Read on.

From Chapter 7, we have a checklist for Macaws. This would go a long way into how you handle and groom your Macaws. As part of socializing the Macaw, you should explore on how to train your pet not to bite, not just on you or perhaps stranger, but at least keep your glasses and bottles intact. This derives from the toys provided to the Macaw. Yes Macaws need toys too. As a parting note for the chapter, how would

you take a drive of fly inside a plane with your Macaw, please find out for yourself.

The Chapter 8 believes that you already have key information on handling Macaws, but perhaps from off the expectations, How would you tame a wild Macaw. It's also worth to know about 2 or 3 Macaw conservation and or rehabilitation projects. Macaws are really entertaining. In this we pick some few note here and there Talk of a story, a poem and the emerging proud bloggers and amazing vloggers, from Macaws.

The Brief history of Macaws:

Macaws have been cited by Lyndon L. Hargrove in his Mexican Comparative Osteology which was written in 1970. In his notes, he mentions about the Indians living in 1536 who occupied areas that are recognized as New Mexico and Arizona today. The Indians used to trade parrot feathers for green stones. In the year 1716, a Spanish priest, Padre Verlarde, had referred to the Pima Indians who used to raise these beautiful birds so that they could use their feathers as adornments. Earlier documents also show evidence that one tribe – Pueblo Indians – used to raise macaws for the beautiful feathers used for ornamentation. Certain Indian tribes also connected Macaws keeping to a person's moral values. For instance, a person of poor character was not capable of keeping a red macaw.

The Macaw parrots in Brazil also have an interesting story, where the natives of the region would pluck a red feather and disinfect the area with an extract from a frog. The feather that grew after the plucked one would be of a bright yellow or orange tint and was considered to be of very precious. The United States and Europe imported huge numbers of macaw pets from early 20th century. The Macaws were hit by first and the second world wars alongside several waves of avian disease outbreaks. It was after World War II that air transport became more viable and the keeping of large parrots resume. It isn't hard to notice a Macaw from its vibrant colours. The importation of Macaws is highly restricted but fortunately, captive bred macaws are available in the market. The Scarlet macaws make one of the most magnificent pets for their attractive plumage and have a boisterous personality. It has a long history of its companionship with humans. These macaws are known

to have been pets of the Incas since the early 12th century. It can be friendly and confident among humans and needs a strong hand in training. It socializes well and is a talented talker. As is the nature of macaws, the scarlet macaws can be very vocal at times.

The green-winged macaw is often called the gentle giant because of its docile nature. People love the bird because of its spectacular colours and gentle temperament. This makes them great pets. Their history in captivity goes back to the 17th century when a lot of emphasis was not placed on breeding them. Most of the parrots that were kept as pets then, these macaws were also singly kept. It was not easy to figure their gender at that time. The focus on breeding parrots started around the 19th century. The green-winged macaw pets breed easily and they are easily available as pets in today's world.

The red shouldered macaws are a smaller species of macaws which are widely found in Venezuela, Guyana, Suriname as well as French Guyana. Their habitat extends into south and southern Brazil, Peru and Bolivia. They were first described by Linnaeus in 1758. They have since been sold as pets. Their fairly small stature makes them a more viable pet for families who may not be comfortable keeping larger birds.

The hyacinth macaws are a species of macaws that are known for their fearless nature. They are very noisy and dependent on palm trees. These macaws are endangered because of the loss of their natural habitat. They were also captured because of the fact that they were highly priced. In 1980's data suggests that almost 10,000 macaws of this species were taken from the wild. They have been sold for \$5,000 to \$10,000 in the pet trade since 1988.

Macaws are soulful birds that have brought great companionship to humans. For those who understand their needs well, these could be the best pets.

The colourful plumage, vibrant and engaging behaviours of a Macaw conform them to loveable pets. Macaws' colouring fits perfectly in the rain forests of Central and South America. Pet lovers who enjoy company of the chirpy birds, have a large variety of macaw species are available to choose from. Their history as pets goes back to ancient times and all along, these civilizations attached Macaws ownership to prestige.

Types of macaws

Macaws are large parrots with many colours for their feathers. The most common types are:

1. Red-Shouldered Macaw or scientifically the (*Diopsittacanobilis*), it's named for the red wing coverts and live in the South-American continent. It is the smallest species of macaw with a length ranging between 30 and 35 cm. The bird is native to the savannah, swamplands, and tropical lowland habitats within its range. The bird has two subspecies, the Hahn's macaw and the noble macaw.

2. Yellow-Collared Macaw, which is also known as the yellow-collared macaw, (*Primoliusauricollis*) is a Central South American macaw that has a bright yellow patch on the back of its neck, hence its name. Their main population lives in the Pantanal of Brazil within lowland habitats but in some location live at altitudes up to 5,600 feet. The macaws are not found in the Amazon Rainforest but inhabit other forests, savanna, woodlands, and grasslands.

3. Blue-Winged Macaw, (*Primoliusmaracana*) is also known as the Illiger's macaw. The species is found in eastern and central South America. They inhabit both evergreen and deciduous forests and are currently threatened by deforestation.

4. Blue-Headed Macaw also known as the Coulon's macaw (*Primoliuscouloni*) is a macaw species that is native to Peru, Bolivia, and far western Brazil. The bird is classified as vulnerable and is threatened by habitat loss and capture for the pet trade.

5. Red-Bellied Macaw, (*Orthopsittacamanilatus*) is a medium-sized macaw living in South America. The belly of this bird has a large maroon patch, thus its name. The clearing of the palm vegetation for human uses and capture of the birds for the pet trade threatens its survival

6. Chestnut-Fronted Macaw (*Ara severus*) is a species of macaw that lives in northern South America where its range stretches from Panama to Amazonian Brazil to Bolivia. The birds have a long lifespan of 30 to 80 years of age. Although the macaw is mostly green-colored, it possesses a chestnut brown patch above its beak, hence its name.

7. Red-Fronted Macaw, (*Ara rubrogenys*) is a macaw species that is endemic to Bolivia's mountainous areas. The species is classified as endangered and is bred in captivity to ensure the survival of the species.

8. Green-Winged Macaw, (*Ara chloropterus*), is another vibrant species of macaw featuring bright red plumage. These birds inhabit the forests and woodlands of South America's central and northern parts. Although still widespread in distribution, the species is subjected to the same common threats as others of its kind.

9. Scarlet Macaw, (*Ara Macao*) is a large bird with brilliant plumage featuring red, yellow, and blue collared feathers. The macaw is native to tropical South America's humid evergreen forests. Although still regarded as a species of least concern from the conservation point of view, some local populations of this bird have dwindled due to habitat loss and illegal capture for the pet trade.

10. Great Green Macaw or the Buffon's macaw (*Ara ambiguus*) is a species of macaw living in Central and South America. Within its range, the bird inhabits the canopy of wet tropical forests where it is highly dependent of the almendro tree. Habitat loss due to the harvesting of the almendro tree for wood and replacement of forest land by agricultural land threaten the populations of the great green macaw. The bird is thus classified as endangered

11. Military Macaw (*Ara militaris*) is a medium-sized macaw species that lives in the forests of Mexico and South America. The predominantly green plumage of the bird reminds one of a military parade uniform, hence the name. The military macaw is currently classified as vulnerable due to the capture of a large number of these birds to satisfy the high demands of the pet trade industry.

12. Blue-Throated Macaw, (*Ara glaucogularis*) is a species of macaw that is endemic to Los Llanos de Moxos, a small area in north-central Bolivia. Due to the highly restricted range of this species and a small population of a few hundred individuals, it is currently designated as critically endangered. The illegal pet trade is considered to be the main culprit behind the demise of this species. The blue-throated macaw is regarded as one of Bolivia's cultural heritage.

13. Blue-and-Yellow Macaw - (*Ara ararauna*) is a vibrant bird with blue top parts and yellow underparts. The birds can be observed in the forests and woodlands of tropical South America. The birds are extremely popular among tourists and bird-lovers due to their striking color, talking abilities, and close bonding to humans.

14. Spix's Macaw or little blue macaw (*Cyanopsittaspixii*), is a native bird of Brazil. The bird is medium-sized and weighs about 300 gms. The plumage of this bird exhibits various shades of blue.

The species had a highly restricted range due to its heavy dependency on the seeds and nuts of the Caraiba tree and similar flora in the Caatinga dry forest climate of Brazil. Due to destruction and degradation of habitat, the Spix's macaw experienced a massive decline in population. Today, these birds are classified as critically endangered while some experts believe they are already extinct in the wild.

15. Lear's Macaw (*Anodorhynchus leari*) is a large all-blue parrot living in Brazil. The bird is about 75 cm long and weighs around 950 g. The Lear's macaw has a highly restricted range confined to parts of northeast Brazil's interior regions. Here, the bird inhabits stands of licuri palm. Due to its restricted range and highly restricted habitat, the Lear's macaw is an endangered species of bird.

16. The hyacinth macaw (*Anodorhynchus hyacinthinus*) is a vulnerable macaw species that inhabits eastern and central South America. It is the longest among all species of parrots with a length of about 3.3 feet from the head to the tip of the tail. It is also the heaviest among all species of flying parrots. The flightless kakapo is heavier than the hyacinth macaw. Trapping of wild birds for the pet trade and habitat loss threaten the survival of these birds today.

17. The glaucous macaw (*Anodorhynchus glaucus*) is a critically endangered species of South American parrot that is generally believed to be extinct. The bird was native to parts of Paraguay, Argentina, and Bolivia. Rumors of sightings of this bird in the wild have kept its status at Critically Endangered instead of Extinct.

The Anatomy of Macaws

Macaws are really beautiful birds that make fascinating and entertaining pets. It is therefore important that an aspiring Macaw keeper becomes familiar with the anatomy of Macaws, this facilitates the keeper to be in an informed position for a well-cared and healthy bird

Macaws have an average about 32 inches in length and most of this brightly colored bird's length is taken up by the beautiful plumage that they depict. A healthy macaw on average weighs about 2.2 pounds. For a healthy bird, the plumage should be full and glossy and clean while the bird has three "fingers" that face to the forwards. That facilitates their squeezing on treats and toys to pick them up with the use of the fourth claw that comes underneath like a

fork. Of necessity it is also good to keep your pet macaw's nails clipped.

The macaw's face is covered by stripes of white skin on both sides and with a pair of sharp eyes for the curious bird. For younger macaws, the eyes are dark and with age, the eyes turn golden yellow. A pet macaw's keeper should learn how the Macaws respond through their expressional eyes, especially when talked to. Although their faces are lovely, their beaks should never be taken lightly as they are extremely strong enough to crack hard nuts open and gnaw through wood. The base of the Macaw's mandible is black, wide and shorter than the whitish hook.

CHAPTER 2 KEEPING MACAWS AS PETS

Macaws belong to the parrot family and what distinguishes them from ordinary parrots is their huge size. Macaws are native to the southern part of Northern America (Mexico inclusive) and the Central of America and also the Southern American continent. Macaws are distinct from other birds in their colorful appearance and they exhibit a plumage composed of wonderful colors.

Sadly, most species of Macaws in wild habitats have become extinct. Environmental changes mostly caused by human action. An example of the extinct species is the Giant Saint Croix macaw. Body language in Macaw parrots.

For Macaw keepers to have a successful relationship with the pet bird, it is important to have a keen understanding of the body language and behavior. Macaws are very intelligent birds and they communicate through their actions, sounds and behaviors, thus using these they tell us about their moods; joy, sadness, hunger, sickness, tired, playful, and fearful or when they want to be held. The intelligence of Macaws enables them to be trained easily as pets especially from a young age.

Some of the behavior to take a keen look on are:

Pinning or Dilating Pupils show that they are very excited, aggressive or they may be nervous. Some new toy or even good food might make your parrot excited; hence it exhibits its excitement.

Paying attention to the behavior of a Macaw allows you to get its mood.

Flapping: Macaws flap their wings as an indication of need for more exercise a stretching or as a form of attracting attention. Flapping facilitates to keep their feathers clean, smooth and straightened. However, lengthy fluffing may be an indication of illness and hence may need to see a Vet.

The aggressive postures that Macaws display include fanning of the tail, standing tall, swaying sideways whilst holding its crest tightly back, bending low with the beak open, spitting, hissing, fluffing its back feathers in readiness to swoop or bite.

Head Snaking is when a Macaw glides the head from side to side just like a snake. If there is a closer relationship between a keeper and the Macaw, the Macaw tends to jerk its head and turn it in an angle making an attempt to look at the owner sideways, holding the head in the same position till the owner responds. It is also an indication that the Macaw wants to play with its owner. However, this could also be an attack posture. In this case, the owner should smartly knock off the beak as it attacks as a learning lesson for the Macaw.

Biting: Young Macaws try to explore around with objects and often bite. To discourage the biting, wooden branches and toys provided instead. **Quivering:** For Macaws shivering and quivering indicates that the birds are frightened, excited or various. In such a case, the owner should speak to the Macaw in an assuring tone to reduce tension.

Regurgitating: is a common trend for the macaws to regurgitate for their mates. It is therefore an expression of affection. Sometimes it may happen to the owner themselves. The Macaw bobs its head up and down while it brings up food and deposits the same in their mate's mouth.

Blushing: This happens with some species of the Macaws like the Buffon's macaw and the blue and gold macaws, they blush as a show of excitement in a readiness to mate.

Facts about Macaws:

1. Macaws are large parrots.

2. Macaws have large and powerful beaks that enable them to crack nuts and seeds within the wild habitats.
3. A Macaw's tongue is scaly and has a bone to enable them to tap into fruits.
4. Macaws have special toe grips that enable them to hold onto branches and also hold items.
5. Macaws are social birds that in natural habitats, they move in flocks of 10 to 30.
6. Macaws have high intelligence and some species can mimic human speech.
7. There are seventeen species of Macaws and most of them are endangered.
8. Macaws are often referred to as the Blue and Gold Macaws.
9. Macaws in wild habitats help promote forest growth by dropping a lot of seed they are eating on the ground and spreading seeds throughout the forest.
10. They can live up to 80 years old.
11. Baby macaws stay with their parents for around one year.
12. Macaws are the largest parrots among the 370 different species of parrots on earth.
13. Macaws could weigh between 2 to 4 pounds or up to 2 kg.
14. Macaws are native to Central and South American forests, though, nowadays you can find a Macaw all around the world in houses as pets.
15. Macaws are diurnal meaning they sleep during the night and will wake you up with the first sun rays every single morning. As long as the room you keep your pet gets any sunlight. This can prove troublesome if you don't organize the pet room well.
16. They have brightly colored plumes; often have colors of red, blue, green and yellow.
17. Macaws can fly up to 15 miles daily just to look for food. It has been observed in the wild that Macaws are avid scouts. They go on long morning flights in search for food.
18. Macaws take just one mate for their entire life time and in captivity, the owner of the bird often is thought of by the bird as the mate. The attachment to owner is a strong bond and can get quite jealous.
19. Macaws share their food with their mates.
20. Macaws groom each other, if separated from their mates.

- 21.The red-fronted macaws, blue-throated macaws and hyacinth macaws are the most endangered species of the macaws.
- 22.Outside captivity the beautiful glaucous macaw is supposed to be extinct already.
- 23.The largest macaw is hyacinth macaw which measures about three and half feet from beak to the tip of its tail. Their wings spread up to 4.6 feet or 1.4 meters.
- 24.The smallest macaws are known as mini macaws which grow just 12 inches but share the same traits of any macaw.
- 25.Harlequin macaw, Camelot macaw and Catalina macaw could be bred to have hybrids.
- 26.A red-fronted macaw can fly at the speed of about 40 miles per hour.
- 27.A few macaws have strong beaks which could crack a coconut shell.
- 28.Each Macaw has a unique feather pattern on their face, this is somewhat like human finger prints.
- 29.Macaws of the Amazon region in the west eat clay from river beds. This acts as a neutralizer for toxins of some plants which are good for them but scientists say that they eat clay to get the Vitamin B in it.
- 30.Macaws are omnivorous and their diet is fruits, nuts, seeds, small mammals, reptiles, eggs and some vegetation which are considered poisonous.
- 31.Macaws make loud calls like screaming and squawking to communicate amongst themselves.
- 32.A female macaw usually lays around 2 to 4 eggs.
- 33.The female normally sits on her eggs to incubate them while the male gathers food for both of them.
- 34.An egg of a macaw will hatch after 25 days , the youngling will attain flight in an average of 105 days usually leaves their parents after a year.
- 35.Baby macaws are born without feathers and have closed eyes.
- 36.Macaws have black or grey eyes when they are young and later change to brownish and then yellow when they get old.
- 37.The scarlet macaw is the national bird of Honduras
- 38.Though they are hunted and entrapped but macaws are also respected and appear on one of the Brazilian bank notes.
- 39.Macaws love chewing and can chew up a lot of stuff in your house.

40. Macaws promote growth of forests as they keep dropping seeds they eat.
41. Foods like cherries, avocado, caffeine, uncooked meat, shellfish and chocolates are dangerous for them.
42. Soft clean branches and wooden toys are their favourites which they love to much on.
43. When kept in captivity they seek a lot of attention from their owners
44. They can get aggressive and scream with loud screechy noises just to draw attention.
45. Macaws perform wonderful tricks if taught and can speak and mimic words and sounds.
46. Macaws are intelligent and have the brain of a 4-8 year old kid and can even remember to unlatch their cage.
47. They are emotionally developed just like a 2 year old and always want attention.
48. If bored they will amuse themselves by hurling things from inside their cage.
49. They are dominating and will constantly push you and think they are in charge. They have to be reminded by you about you being in charge of the place and not him/her.
50. They are allergic to fumes from non-stick cookware and from air fresheners.
51. Macaws get sick if their cage is not cleaned constantly as the ammonia released from their droppings are bad for them to inhale.
52. Deforestation, pesticides sprayed on banana plantations and smuggling have killed most of them.
53. They love to keep their beaks busy and if they are not given something to chew they will pluck their feathers off.
54. If you have other small pets at home like mice, guinea pigs, hamsters and other birds the macaws could be dangerous for them. They need to be supervised if you wish you make them friendly. Do not leave them alone till you are absolutely sure about their bond.
55. They should be given fresh water every day and they should be given regular baths to keep their plumage and skin glowing and healthy. Use lukewarm water to bathe them. Their beaks should be trimmed if deformed and overgrown. There are many beak grooming items available in pet stores which will help them keep their beaks in shape.

Senses in macaws species

Macaw's have spectacular appearances and fluidic body structures that render them as one of the most heavenly creatures on earth. They have boisterous personalities and gaudy feathers, the reason why we are easily drawn among the most intelligent birds. Some of their senses are heightened while, for others it can be fairly dull when compared to humans. Albeit all that, their senses are perfect for their survival. Here is an insight into the senses of the macaw across the species:

Sight: During the initial days after hatching, they remain highly dependent upon their parents. While the basic plan of a macaw's eye is similar to that of humans, there are certain features which set them apart.

Macaws are more active in daylight, so the bulb of their eye is flattened and substantially shallow.. This allows it for a macaw to see with only one eye at a time. This strategic positioning of the eyes of macaws gives them the ability to view that is almost 360 degrees. This means that they can see most of what is in their front, back, above and below. It can also move the eye bulb inside its socket and helps macaws keep an eye out for danger without turning their heads.

Further, Macaws have an eyesight that is excellent in perception of details and motion. They also perceive different spectrum of colors inclusive of the Violet wavelength.

Hearing: The hearing ability gives macaws the ability to look out for imminent danger as they socialize with others in the flock they sense danger by listening to the different sounds. They have funnel-shaped ears allowing them to focus sound waves. Their ears are located slightly behind the head and are covered with soft feathers known as auricular feathers. Fortunately, Macaws hear small frequency ranges according to their acute recognition skills and intent listeners. Macaws perceive pitch, tone and rhythm of at higher levels than human.

The variation of tone and pitch perceived by macaws helps them recognize other macaws in a flock. They also decode out different sounds, songs and calls which serves for different situations. This helps them differentiate calls as warnings for predators around, or an offer for food or claiming a territory. In natural habitat, Macaws

are highly vocal birds and they can be easily identified in the forests because of their endless screeching and squawking.

Touch:The sense touch is not used as extensively by macaws but, it remains vital especially for flight. Macaws are very sensitive to a change in the temperature in the air, pressure and wind speed. These changes are felt by macaws as it is transferred down its feathers to the extensive nerves within their skin.

Macaw species like to preen their feathers and those of partners, often seen as a courtship behavior as well. Naturally, they relax perched on tall branches, preening their partners and their fledglings to keep feathers clean and bright. Their feet have fewer nerve endings which makes it easy for them to perch on different places without feeling to hot or too cold.

Taste:Birds have a comparatively poor sense for taste.in comparison,Macaws have around a 100 taste buds while humans have more than 10,000. Although,birds have the ability to taste sweet, sour as well as bitter flavors but they usually depend on the texture of food. They can determine which food sources are good for them by the taste. While taste matters, birds will usually depend on sight and hearing to look for food.Hence,Macaws often choose their food depending on how it feels because the taste does not play a very important role. This is the reason why a parrot can bite into hot peppers without feeling a thing. Most of the food choices of macaws depend on factors like the food is easy to acquire, it fulfills the dietary needs of the bird and their beaks are better equipped for eating particular foods.

Smell: Macaws are known to have olfactory organs that are better developed than those of other birds. While they may not have an extraordinary sense of smell, it is still well developed. Smell is not used by macaws to look for food. They depend on sight and hearing for that

Factually, the macaw , bird of beauty and intelligence – uses its sense of vision and hearing the most. The other three senses in birds must not be undermined, and they are still important for the bird however their use is not as widened as the other two. When we understand the ways in which macaws use their senses, we can help them in a better way to survive and enjoy their company. If you have a macaw pet, you must know the way they use their senses so that you can help them grow in a better way

Macaws for Business

The keeping of Macaws can be undertaken as a hobby or a business by breeding and selling the pet birds. Breeding the birds at home or aviary offers more opportunities.

Some of the opportunities include;

First, offering the Macaws for photo shoot outs at a fee. Secondly, opening for local and international tourists to pay some fee to access the aviary to see the unique birds. Thirdly, offering young and even mature Macaws for sale to willing pet enthusiasts. Fourthly, allowing commercial advertisers to take videos of Macaws to incorporate in their advertisements/infomercials. Fifth, guarding rare species from extinction and sustaining their multiplication (Conservationist individuals and organizations may fund your project for this cause)

The internet offers a conduit for information transfer all round the globe. Thus the world is fully aware of most of the endangered species. The rare species of birds, Macaws inclusive have created a unique niche for entrepreneurs to explore. Part of the conservation efforts have seen Aviaries and museums set up for the unique birds.

For those keeping Macaws as a hobby, it proves a worthy venture to keep oneself busy with a pet that one cares about. The noisy Macaws and their assortment of colored feathers offer a breathtaking sight. For the pet owner, the curiosity of Macaws is just amazing, their colourfulness tends to contribute to their liking for jewellery.

For students seeking advanced courses with a passion for animals, the institutions and organizations with a higher affiliation for animals and birds offer amazing avenues for career growth. The avenues range from Accountancy and management of the institutions, Avian Veterinary specialist to advanced genetic science careers. It would also add value to have a combination of both passion and specialization in education for the courses related to birds and Macaws in particular.

The Legal aspect of keeping Macaws.

The question as to whether it is legal or not to own a Macaw is relative. All over the Globe, we belong to a state or two, and it all comes down to what the state has put down as law. There are some states that are opposed to owning Macaws, others are for it. It therefore follows that, the state legal departments provide legal structures for all the owners interested in the business of keeping Macaws. The main point is to ensure that you do some background checks with the state legal departments to be in line with their minimum requirements. While a Macaws lover travels across a region, they should be wary of the prevalent regulations guiding ownership of birds and pets in general. The requirements will range from nothing to as stringent as even specifying the cage sizes.

The aspect of legality of owning a macaw in particular may pose a possibility of numerous legal tussles. What should one do if their neighbor sues for nuisance if your Macaws is rather noisy? We should all consider his before keeping one. The possibilities of legal suits arising from owning a Macaw may appear numerous. However, this will have a great bearing on the environment in which we keep our Macaws.

In a nutshell, the Laws guiding the permits and conditions of keeping Macaws should be flexible enough. By flexible here we refer to the provision of optimal rights of both human and the creatures involved. As such, a Pet lover should not suffer grave consequences for owning a Macaw while it's in transit for rehabilitation, courtesy of his humane nature.

When it comes to transit of birds in general the state departments control the licencing of the transit itself. The main essence is to maintain ultimate control on the movement of the birds. A reasonable instance is in the outbreak of airbird diseases. The Macaws owner may not be aware of the severity levels of the current status. The state department are authorised to licence when an outbreak is put under full control. This is for the interest for both the Macaw and its owner. The health of both the owner, the pet and that

of macaw pets in other regions. This provides a win-win scenario for all partners involved.

Notes for New Macaw Keepers

New Lovers of macaws or even those who may fall in love with Macaws after say rescuing one, need to know who can and who cannot keep a Macaw. The truth is, not everyone can.

As a new Macaw keeper, it may be worth to note that the real experience in keeping one can only be experienced by the virtue of owning one. A few of us may be in close relations to Macaws keepers who may also share their information freely.

If one is a New owner or an aspiring one, here are some few things to note about, who can keep a Macaw:

1. Macaws love petting just like cats. The petting should be a bit gentle, not as rough as you would pet a dog. This will assist in maintaining the uniform feather structure. Keeping in touch with a Macaw will lead the owner to detect when the Macaw is ready for petting. When feeding the Macaw it may not respond to petting. A good indication when the Macaw is responding positively to petting is by way of raising/lifting feathers. To show appreciation. The petting should be done gently in a relaxed fashion. Experienced owners will tell you that stroking the base of the tail elicits sexual feelings and is recommended only when encouraging mating. Petting is also good for the regions below the wings, the cheek and feet. When training them, petting offers relaxation and bonding which increases confidence (less fear) of the Macaw with the owner/Trainer.

2. Macaws do regurgitate often, if one is not comfortable with that, then they may probably make poor keepers of Macaws. For experienced keepers, this is natural for Macaws and its part of their daily health.

3. Macaws can be loud in their noise making. This will depend with why they make the loud sound, like upon sighting a stranger, or very excited.. A good Macaw keeper must be able to read the moods of the birds. On a good note, Macaws can be trained to make lesser noise and this will depend on the

owners training ability alongside the age. As an owner, it may be had to train an old Macaw to be less noisy.

4. Macaws need to be clean and presentable. The aspiring owner must foresee this and be comfortable with some of the messy trends of Macaws

5. Macaws bite, but if not handled properly. Good handling skills are essential for an already or aspiring Macaw Keeper. Should you be clueless on handling a bird, the you would probably make a poor keeper of Macaws.

6. Macaws require a lot of time from the owner and the keen dietary requirements, primarily fresh fruit and vegetables, specially formulated pellets and nuts, which can be expensive.

Chapter 3:THE ENVIRONMENT OF MACAWS AS PETS

Macaws as pets do require some general environmental standards to keep them experiencing a home in our homes, that would accommodate them to as close to their natural habitat as possible. Some of the requirements are:

Adequate lighting

Birds appear healthier, look better and even behave better when exposed to sufficient lighting on daily basis. In this case, full lighting refers to natural sunlight, that is essential for synthesis of vitamin D which regulates calcium and phosphorus levels in the body. Some species have acute problems associated with insufficient lighting. An instance in one for the African Grey Parrots, which is are especially prone to low calcium levels (hypocalcemia) resulting in behavior problems such as feather picking, biting, and screaming. Macaws breeding has a linkage photoperiod (amount of daylight). The birds may not breed sufficiently under conditions of inadequate light. The recommendation is to provide a total of 10-12 hours of light on diurnal basis. It is advisable that, during mild temperatures, the birds are taken outside in his cage, while cage doors securely latched. This is for safety so as you do not leave your bird outside unattended. A keen point when cages are placed in the open, owners should ensure that the birds can access a shade, placing birds in direct sunlight without a shade may be

torturing them. It is recommended that to bring the birds out during the late morning hours, when it is not too hot, and insects are not as abundant. If it is impossible to place the birds outside, a good alternative is to ensure that the birds access several hours of full spectrum light with UV-B. Artificial set lighting up with a timer to provide the appropriate amount in hours set at a distance of 18 inches above the bird. Note that regular fluorescent bulbs do not produce the proper spectrum of lighting, it's unfortunate that the fluorescent lighting is very irritating to birds who can easily detect unique flickering (when humans cannot). For keepers who are aiming to breed a recommendation is to gradually increase day length from 10 hours daily to about 16 hours daily.

Need for darkness

Macaws also need darkness, most species are from the tropics and get 12 hours lighting and 12 hours darkness. From this, it is good to note that the pet bird requires more sleep than a human being (at least 10 hours daily). Lack of enough sleep affects Macaws in different ways. The effects of lesser sleep emanate as:

For one, poor sleep leads to stress which can lead to behavioral anomalies like feather picking, biting, and screaming. Secondly, consistently Sleep deprived Macaws lowers a bird's immune response to diseases.

Thirdly, poor darkness may trigger some birds to breed, this case may be manifested by chronic egg laying.

For households with no movement for 10-12 hours, the macaws cage could be simply covered while the bird sleeps. Another alternative is to provide a separate, small sleep cage in a dark, within a quiet area of the vicinity. For a busy owner, the birds can be kept in a dark room with set radio and timers to awaken and light up the birds area. This means that artificial conditioning may be necessary with just an upgrade of equipment to facilitate an adequate artificial environment, which in turn will host optimum health, fitness, and disposition for the birds.

The natural habitat of a Macaw

It is important for the Macaw keeper to have a good understanding of the Natural Habitats for Macaws. That forms a great conception of keeping Macaws as we do, as pets. The structure of their plume allows them to easily glide through the trees in the forests and land perfectly within rain forests and a sight of them in the wild could be one of your most treasured experiences.

The rising rates of deforestation correspond to the rising rate of extinction. Concurrently, the Illegal trading activities concerning Macaws are another reason for the huge decline in their numbers.

Hyacinth macaws, mainly found on the riversides of rain forests and palm swamps. It survives in seasonally moist forests with broken canopies. The Pantanal region in Brazil is the best place for sightings of the bird. It is known to prefer open areas with wooded habitats or ideally on the edges of dense forests.

The blue and gold macaws which are known to have the largest natural range. They prefer living in wooded areas which are close to water bodies. It is found in Eastern Panama, Bolivia, Paraguay. Most of the Northern regions in South America and the Eastern regions of Brazil. They prefer the Aguaje Palm Trees for nesting. Living on forest edges and can fly for long distances into the grasslands for food every day and they often spend the dry season in the forests. The red-shouldered macaws are a fairly smaller species and macaw facts show exist in the native lowlands, savannahs and swamplands Venezuela, Bolivia, Brazil and Peru.

The scarlet macaws are native to humid evergreens and have suffered heavy habitat losses via deforestation. You can find these birds in regions of Mexico, Peru, Bolivia, Brazil and Trinidad. They nest in tall deciduous forests and prefer living near rivers. They live in big flocks and love to feast on nuts, berries and leaves.

Macaws for pets are birds of immense splendor, but have been slipping into extinction as their natural habitat have been invaded immensely across the globe. Most of the species have accepted captivity as their safe haven and Biologists, governments and Not

for profit organizations are working ceaselessly to protect the species of the Macaw as a magnificent bird.

Macaws Artificial Habitat-Accessories for Macaws as pets

A Macaws in captivity should be allowed to live as close to its life in the jungle. A Macaws must also be able to move freely within a cage and aviary which helps in them keeping fit. The movement helps keep off the condition of muscular dystrophy, that renders it unable to fly. The accessories include:

Bird Perches

These can be improvised from fresh fruit tree branches which the bird will love to chew on. (such should be changed / replaced regularly). The branches need to have some areas that are about 3/4" in diameter, and even bigger diameter areas for larger macaws.

Feed and Watering dishes

It works best to have the dishes hanging from the side for feed and water. Placement of the perches away from dishes helps to avoid the soiling of the feeds and water with droppings. The use of plastics is discouraged as the Macaws will chew and break the plastic and it can become hazardous if ingested.

Macaw Playpen

A sizeable playpen is ideal for playtime outside of the cage itself. In essence it is just a large free standing perch with food, water and toys hanging around. There are also commercial playpens for macaws with a tray at the base for holding anything on its floor.

Macaw Bird Toys/Playthings

This range from climbing ropes, chains, bells, parrot swings and wooden or other bird toys. It is also good to provide destroyable hence "interactive" as they help relieve boredom. The durable toys will last longer, though not interactive. It is good to note that Macaw toys can be expensive.

Placement and positioning of a Macaw Cage

This should be considered with key points taken into consideration as macaws are very loud, the amount of noise and the closeness of neighbors one of the factors when determining where to keep your bird. By Macaws being very social and inquisitive, you could set to house your pet in a room that gets visited frequently by the family. The cage should be placed at eye level.

For an Aviary, for a breeder, if placed outdoors, may need protective shelter that can be heated and cooled accordingly with enough light and ventilation. The aviaries should also have flight cages attached with climbing branches and a bird bath. For Macaws, an ideal aviary needs to be of sturdy construction constructed of brick or metal.

An indoor Bird Room can be nice but not necessary for Macaws. The room could also go well with at least two compatible birds. The room requires to have perches for standing and climbing, places for toys, and mounted food, water and treat dishes. A point to note is that the room should be bird proof as the Macaws will chew anything they come across. The level of scrutiny should be kept enough as the birds may gnaw on harmful paint surfaces or even live electric cabling.

Beak Conditioners

- **Foraging**

Vitamins & Supplements

Introducing Macaws to other Macaws, pets and small kids

Just as human strangers would act, Macaws have a tendency for the same. Actually, Macaws should be introduced to each other in stages with keen interest to nature an environment of no harm and nature friendly relations.

Keeping the new found Macaws quarantined in a separate area of your house for at least 30 days to make certain he has no contagious diseases or parasites. Feed the Macaw water and food from his own bowls, and thoroughly cleanout of the cage daily and do not her to play with toys used by others. After the thirty days quarantine, move the Macaws into the same room, but keep them in separate cages. They'll be able to observe each other from their cages and get accustomed to each other with protection from the individual cafes. The caretaker should be keen to offer equal amounts of affection for each, without any favoritism which may upset one of them. Note also to attend to the first bird first to assist him to remain confident and ward off any feelings of selfishness. The birds should remain in the separate cages for a week at minimum.

After the week, close the doors and windows. And allow the Macaws to fly around the room and enjoy hanging out with each other. This will give them time to bond on their own terms and build trust without feeling intruded upon in their cages. The owner should return the Macaws to their cages if they show signs of any aggression toward each other, such as lunging, squawking, screeching or nipping. Further, place the Macaws in one cage that's big enough for both of them, once they've gotten used to each other's presence and they're digging each other's company. Give each bird his own water, food bowl and perches to make sure they don't have anything to squabble over, and they'll know they're equally taken care of.

- **How to Discipline a Parakeet**

The costs of Keeping a Macaw

The costs of owning a Macaw can add up quickly and can be much more than your ordinary expectations. This will be depending upon the individual species, as some might need specialized and more expensive facilities. The best way forward is to do some bit of research on the bird you are targeting to take in as a pet. Holistically, budget for the purchase of the pet itself and take a realistic approach on the costs of maintenance of the birds. The maintenance should go into feeding, medication/vaccinations, micro chipping, bird seeds and pellets, fruits and vegetables, treats, vitamin supplements, cleaning supplies, new toys and routine veterinary exams which may include vaccinations and clipping of wings, beaks and nails. Again, the costs will depend on the species of bird and miscellaneous costing. Further, a keeper must consider the time required to nature a relationship with the birds.

Before bringing the bird into the house for yourself or for children, decide if your budget can accommodate it. Do not make the bird suffer because you made an impulse buy. Pets of any kind take money and time. With that in mind, they can be wonderful pets to have.

Maintenance of macaws Artificial -habitat/environment

Housing: Macaws rarely fly in a confined environment as they prefer to walk or climb. Allowing Macaws to access to a large aviary gives the area to fly freely and display their colors whilst giving them the exercise they need to attain good physical fitness and health. For adult Macaws they should only be housed as one pair per large aviary or suspended cage. In case other macaws are housed adjacent to the macaws, double wiring between the aviaries is essential to minimize the risk of injuries by the neighboring birds. Each Macaw should have a perch and nest at the extreme end of the Aviary. While using branches from local trees is good to get certification from local Nurseries that the trees are not toxic to your Macaws. A regular perch cleaning routine exercise should be maintained. An ideal aviary should be 4 or more meters long and about 2 metres wide. If possible the aviary roof for Macaws should be higher than a typical parrot aviary and can be about 2.5metres high (about 8 - 8.5 feet). The larger the macaws should get larger aviaries respectively and one for a Blue and Gold macaw does well in a 10 metre long aviary. For breeders, suspended cages are often used to house the Macaws. A suspended cage should be no less than 2.5 meters long and be at least 1.5 meters wide. The requirements of the large birds for a large suspended cages, special requirements / provisions may have to be incorporated into the cage design to allow for safe capture, inclusive of an extra door. Consider the strength of the wire meshing as critical as macaws have powerful beaks and will soon find any weak points. 10 gauge galvanized wire mesh is often recommended as the safe strength to avoid the possibility of birds breaking the mesh as well as a deterrent to people or predators trying to get into a cage or aviary. Since the spacing in heavy gauge mesh are usually large enough to allow predators like rodents, snakes, small birds and other vermin to access, extra and appropriate pest prevention measures may have to be incorporated into the structures design. The paintings should be done keenly to avoid zinc based compounds that cause toxicity and increase the visibility of the birds within the aviary.

Housing /Cage Maintenance:

Macaws basic cage care includes daily cleaning of the water and food dishes. Weekly washing of all the perches and dirty toys. The floor of the birds should be scrubbed every other week. Thorough hosing down and disinfecting of an aviary should be done yearly with a round of replacements that needs to be freshened such as old dishes, toys, and perches.

Breeding of Macaws:

Macaws being socially gregarious type and should be preferably housed with a companion of their own species. The average Macaws lay 2 - 4 eggs per clutch and their Incubation is about 26 - 28 days. Parent reared birds attain flight within 3 - 4 months. On the contrary, hand reared macaws may take longer to flight. Notethat the Hen Macaw starts incubation after the first egg is laid. Larger macaws lay at 3 day intervals and the smaller ones laying at 2 or 3 day intervals. The cock bird is not involved in the incubation of the eggs but may spend time in the nest with the hen. The hen feeds the young in whilst in the nest and the cock only starts to feed the young in the nest after they attain an age of around 3 weeks.

If you keep macaws and know their hatching date it is good husbandry practice to inspect the nest, ensuring the newly hatched young is being fed and looked after. This mostly applies to pairs that are first timers or inexperienced or a case of a new mate. As a point of caution, one should ensure that additional foods available to adequately cater for the needs of both the adult birds as well as the rapidly growing Macaw lings. Novice macaw breeders may share with experts and or veterinarians on the nutritional requirements. For matters of caution, an owner should keep phone number of one or more Avian veterinarian for assistance at any point. Having a suitable incubator and a hospital cage just in case of accident or incident. The cases demise of a hen mid way into incubation can be handled with an incubator while too many younglings may strain the Parent Macaws. Sharing the states of breeding with some friends, family or suitable helpers to the possible need for their help prior to the birds starting nesting. With expensive or rare birds in one's care, it is essential to have good supplies of back up breakable equipment and material(with contacts

of late night Vets and emergency suppliers). Upon the young attaining flight becoming fully independent, they should be placed in an aviary beside or adjacent to the parents aviary so they can continue their normal development. In natural habitats, the young birds may stay in close proximity to the parent birds till the start of the next breeding season learning the correct social skills and species specific behavior by visual observation. Breeders may allow the birds to rear the whole clutch once per year.

An alternative path is to remove eggs as they are laid and to incubate the eggs and hand raise the young. Note that the removal of the eggs as they are laid will usually stimulate the hen to lay more eggs. (This corresponds to natural occurrence in the wild should the eggs be taken by predators.

Breeders who are not sure of the fertility of initial eggs may omit incubating the same. Removing the eggs soon after being laid allows the production of up to 12 young ones per year.

Breeding pairs may face some difficulty and the aspiring breeder should come in and offer some help. The trick is some pairs need a bit of encouragement or stimulation to help the birds breeding cycles to be perfectly matched. Placing a board over the nest entrance facilitates synchronization of the breeding pair, this corresponds to what happens in the wild, the birds will then chew the timber around the entry hole till it is to their liking and then start to build the nest and lay the egg clutch.

Good breeding results should be targeted by essentially starting with healthy robust birds that are capable of flying well. For a healthy breeding bird, it should have a good posture (sitting correctly) on the perch and looks alert and is aware of its environment. To start with, an Avian veterinarian check up will be a good investment for breeding. Other pathological tests may also be performed to iron out any doubts. Great caution with health check ups is that there pathogens / diseases that may have no effective tests so care, cleanliness, hygiene and observation must be maintained at all times as the first preventive barrier to health complications. Birds failing a health check should be isolated from the rest and put under supervision-Quarantine.

Macaws may also be bred in suspended cages with restrictions to flying freely. However, placing them in a big aviary after the breeding season they will rapidly regain their muscle tone and

regain their overall optimum fitness levels to fly again. Generally, the fitter the birds are at the start of the breeding season, the better their chances to raise a healthy clutch of the young.

Larger Macaws may take up to 5 years to reach sexual maturity and attain a lifespan of over than 50 years. For smaller species, it may take 3 to 4 years to reach sexual maturity. Note that just because the bird has reached sexual maturity does not mean the bird is suitable to start breeding. The pair may even lay their first eggs, but may take a year or two to develop the necessary skills to raise a successful clutch of young ones..

New breeding pairs in their first or second year of rearing their young may require more privacy than those pairs that are more experienced. Avoid too many and unnecessary inspections as such may unsettle the inexperienced birds leading to poor results. To avoid unnecessary inspections, Small video or "spy" cameras can be attached to the nests to facilitate the monitoring of the progress- video images and sound, especially with a 24 hours vision capability. Some advanced cameras have wireless transmission and are ideally if attached to the top lead of the nest.

Nest boxes for the breeding pairs need to be large sturdy so that they can withstand their destructive nature of Macaws. Large wood wine barrels are often used as they are often made of strong oak and strengthened with metal bands Macaws nests should be placed on a strong platform to avoid any unfortunate accidents. If the nests are hung externally to the cage, they need special attention as the macaw can easily chew through a timber log or timber nest box and escape. As a matter of caution, external strong wire mesh can be attached to the outer walls of the nest box so if the nest wall is compromised, the parents or young will be unable to escape the nest box.

The nest box entry hole for other parrots is normally circular. But one for a Macaw are often square.

The nest should have a layer of about 100 mm deep nest material. If the Macaws happen to remove the material, more should be added to secure the eggs.

One important point is to have a strong "chew proof" ladder (10 gauge wire mesh is recommended) on the inside of the nest box, below the entry hole to allow the birds to climb down to the floor of the nest as opposed to jumping. An internal ladder is useful in nest

boxes / logs that are in a vertical or near vertical position. The ladder also allows the birds to easily and safely exit the nest.

Some Tall hollow natural logs that are too heavy to hang from a wall or roof, may be placed leaning on a wall, while one end resting on the ground and the macaws have achieved good breeding results.

In natural habitats, macaws usually nest in tree hollows, often in the trunks of the trees. Hollow branches of a tree or trunks offer natural insulation from both excessive heat and cold, while the decomposed timber material provides the nesting materials for the eggs to be laid. Natural tree nest sites also help maintain an optimal humidity level by being able to absorb excess moisture or release moisture if the air dries out. If a large log is not available, the use of thick timber to make the nest is the next best material. Relative to the cost of these birds, a large hardwood timber nest box is not expensive and is a good investment towards a happy pair of breeding macaws. Always have a spare nest (as close a design and dimensions as possible to the other nest) handy along with some spare hardwood timber panels available to repair a chewed out nest wall.

Nest boxes/logs should be placed high up in the aviary under cover. Many prefer the nest box opening to be in a darker / shaded part of the aviary that provides a degree of privacy. At least one perch should be at each end of the aviary and one perch should be close to the nest and be about the same height as the nest opening. The perch closest to the nest opening is the perch most often used during the breeding season. The cock bird will use the closest perch to the nest so he can protect the nest, the hen and their offspring. The same perch configuration applies to suspended cages.

In the wild a pair of birds may have a wide selection of potential nest sites. If either bird is not happy with the other bird's choice, the house hunting will continue till both are happy. If space allows, and you have some spare suitable nest boxes or logs, give the birds a choice of more than one nest. They may also prefer the alternate site with an identical nest box or log. Once a pair has accepted a nest box as "theirs", keep that nest box for their sole use. This practice will minimize the transfer of any unwanted pathogens or parasites between pairs or aviaries. Throw out or destroy damaged nest boxes or nest boxes from birds that become ill. It is difficult to sterilize a timber nest box from a bird that has become ill so just dispose of the nest and give them a new one.

Nest boxes made from plastic or metal can be successfully used but can cause problems with excessive heat or cold and do not have the ability to absorb any excess moisture. Metal and plastic surfaces are usually very smooth and do not allow the adults or young to get traction on the material. The smooth surfaces may cause difficulties for the birds entering or leaving the nest. If there is insufficient nest material in the nest, the young may not be able to get sufficient grip on the nest base and end up with leg or feet problems.

Nest inspections:

Nest boxes / logs are best positioned so the nest inspection can be carried out from outside the aviary. To avoid upsetting the adult bird/s in the nest and causing possible damage to one or more eggs or the young birds, nest inspection is best done when the adult birds are out of the nest. If the owner enters an aviary that has a nest that has to be inspected from inside the aviary, the birds will usually retreat into the nest to protect the eggs or young. Two birds in the nest in an aggressive mood can result in significant damage to the eggs and/or young.

Nest boxes are often horizontal or near horizontal. The birds can walk into the nest and down a slight slope to get to the eggs. This eliminates or minimizes the risk of these large birds jumping down from the entry hole onto the eggs or young and damaging either the eggs or young nest material: Many large species of cockatoos and macaws like to make their own nest material by chewing up short lengths of softwood. Short batten-like pieces of wood placed in the nest will be chewed into the size the birds prefer. Some keepers place short chunky pieces of wood or pine bark into the nest for the birds to chew to the preferred size. If pieces of timber or rough wood chips are placed in the nest, the breeding birds will need extra time to reduce the large pieces into a suitable size and consistency prior to the eggs being laid. The extra time taken to reduce the material to a suitable size may help the birds synchronize their breeding cycle and improve the percentage of fertile eggs.

Alternatively, coarse wood shavings, decomposed non-toxic saw dust, and/or peat moss are commonly used.

Movement restrictions- and time spent outside cages

Note: Macaws, when not handled correctly, can become extremely aggressive. Their beak is capable of inflicting severe injuries, especially to fingers or hands of young children.

Macaws and children do not mix. Never leave a child alone with a macaw. Sooner or later an accident will happen.

The temperament of a macaw may change as they grow up. Hormonal changes can significantly change the bird's temperament when puberty starts or becomes a "teenager". Some can become very territorial and show aggression if you enter their space.

They can bond to one person in a family, yet be very spiteful or aggressive to all other people.

Some of the larger macaws can live for 50 or more years, often outlasting the owner.

Most Macaws do not have a long history of captive breeding so they are less "domesticated" than most parrots and therefore macaws should be treated with more respect and tolerance than the average captive bred parrot.

Learn from an experienced breeder or avian veterinarian how to correctly handle, capture and transport these birds so minimal stress is caused to the bird and no injuries are inflicted onto any of the handlers. Keep a bandage or first aid kit handy just in case an accident occurs.

Macaws should not be allowed on a person's shoulder. A bite on the face or head could be extremely serious. The screech at close range to the human ear can cause irreversible hearing problems. A Bird on a shoulder can develop a "superior" attitude and become harder to control. A bird on the lower arm is more controllable and accidental bites or injuries at this height and potentially less damaging than a face or head injury. A bird on the lower arm is less likely to develop a "superior" attitude and be more controllable.

Macaws are probably the most universally recognized birds. Their bright multi-coloured plumage and long tails are very distinctive. Some macaws were kept as pets or captive birds about 1000 years ago and were used as a barter currency in trades by the local native inhabitants of Mexico and South America. About 500 years ago macaws were taken to Europe where they soon became a status symbol for the wealthy. Until recently these birds were rarely bred in captivity, relying on a regular supply of captured wild birds to replace deceased birds or to satisfy an ever growing demand for the pet bird trade. Serious breeding of macaws started in the United

States of America during the 1970's. Captive breeding became a relevant issue only when the export of wild caught birds was deemed as illegal. Successful captive breeding can take some of the pressures off the remaining wild populations. One of the future pressures on the captive populations is one of genetic diversity. In the USA as well as Australia, many species of macaws started from a low population base. As the numbers increase, birds may be paired up with closely related birds. Future breeding for colour mutations (making for short term increase in monetary value) will degrade the genetic value of these birds as a future resource of pure stock. Colour mutations of rare or endangered birds are of little value as genetic lines for possible re-release back into the wild.

International agreements now restrict the movement of many species of birds within countries as well as internationally. i.e. CITES agreement.

Macaws have the widest differences in sizes of any bird. Macaws range in size from the Hyacinth Macaw which is about 900 - 1000 mm (36 - 40 inches) in length to the smallest macaw, the Red shouldered Macaw (*Ara nobilis*, or *Diopsittacanoblis*), which is only about 300 mm (12 inches) long. An adult Hyacinth Macaw may weigh about 1500 grams and the lightweight Hahn's Macaw may weigh in at only 250 grams.

The smaller macaws are predominantly green whereas the larger macaws have multiple bright colours. The smaller "mini macaws" have one ability similar to humans. They have the ability to "blush". When they get excited or alarmed the blood flow to their facial skin increases causing the skin to redden. Red shouldered Macaw (Hahn's Macaw) is an example of a macaw that can do this.

Hand raised birds can become tame and are often kept as pets and may learn to talk, however they require a large space and can be noisy. Macaws can be destructive birds. The smaller macaws are easier to cater for but these smaller birds lack the colors of the larger macaws.

Some of the Macaws are on the CITES Appendix 1 list and are endangered in their natural range. Loss of habitat and trapping are the main pressures on their long term survival in the wild.

Macaws are basically monomorphic. Surgical sexing or DNA testing are the best options to accurately determining the sex of each bird.

Macaws are probably the largest and have the most powerful beaks of any birds in Australian captivity so the typical parrot carry box will be inadequate. Suitable large strong carry boxes must be available. One commercial option is to purchase a cat / dog pet carriers that are usually strong plastic with locking doors.

Special nets and catching equipment will be necessary to ensure injury free capture of these large strong birds. And, to prevent any injuries to the person catching the macaw. An angry aggressive macaw can do considerable damage to arms, fingers and hands!!

Extinctions in the wild: Macaws are vulnerable to extinctions by the rapid loss of their preferred habitat and food source. Trapping of birds for the bird trade is detrimental to the survival of these birds. Macaws were found in several of the West Indian Islands and Cuba.

Why are single birds so noisy? In the wild macaws are social gregarious birds. After a wild bird has reached sexual maturity and found a suitable mate, the two birds are rarely far from each other. They fly together, feed together, sleep together, and engage in mutual preening. In captivity many birds are kept as a pet or companion bird and have no contact with another bird of their own species. When they have no possibility of a bird mate, a macaw will form a strong bond with one person who looks after it. This human bond seems to be more common with cock birds than with hens. The human who cares for the bird is seen as a substitute mate. When the human leaves the bird alone the bird may start to scream for its "mate", the human. This instinctive need for the bird to have their mate with them at all times can make the Macaw a demanding task. Lots of branches to chew and the provision of bird play toys to the bird may help the bird amuse and entertain itself while the owner is away from their immediate contact.

Chapter 4: WHERE AND HOW TO GET MACAWS

Sourcing for Macaws as a new pet keeper

Things to Consider Before Buying a Bird: Time Commitment, Cost, and Housing .Birds can be wonderful pets. They can bring years of enjoyment into a home. However, owning a bird takes no less responsibility than owning a dog or a cat. Make sure you take the time to do your homework and research the species you want before you get one. Start by making a list of reasons you want a bird and a

list of traits that are important to you. Compare species of birds to narrow down your list to a few that make the grade. Several questions to take into consideration include the following:

- Why do you want a bird? As a pet for the children? As a companion to you or to another bird?
- How old are the children in the family? If your preteen or teenager wants a bird, who gets the bird when they go off to college?
- Where will the bird stay? Indoors? Livingroom? Outdoors in an aviary?
- Do you want to teach your bird to talk? How much noise is acceptable to you, the family, and the neighbors? Some species are naturally quieter; others can scream and screech.
- How much time are you willing to commit to the bird on a daily basis? Half an hour a day is needed just for daily feeding and cleaning. What about playtime and socialization? These are essential.
- How long do you want the bird? Finches live about four years; Budgies, nine years; Cockatoos, forty years; an Amazon or African Grey, up to fifty or more years. Make sure you plan for the bird's entire life. This means including for the bird's future care in your will.
- How much are you willing to spend for up-front costs such as purchase price and the cage and accessories? Prices range from several dollars for a small Finch or Budgerigar to several thousand dollars for a Hyacinth Macaw.
- How much are you willing to spend on food, veterinary care, and toys?
- Who will watch the bird while you are on vacation with the family? Some birds do well at boarding facilities while others are much better at home and require someone to come in and care for them.
- Where will you buy the bird? Breeder? Pet shop? Individual that no longer wants or can keep a bird?
- How many birds do you want? Some birds do well alone with enough human attention. Others are much happier with others of their own kind to socialize and live with.

Health is a big consideration in getting a bird. They can carry diseases that can infect other birds in the house and possibly humans also. Learn what a healthy bird should look like and how she should act. Take your new bird to an avian veterinarian within a day or so of purchase for a check up.

If you have a preference for male or female, remember it may be difficult to tell the difference in some species. If breeding the bird is in the plans for the future, DNA testing or surgical sexing is available at some veterinary clinics.

These questions should just be the start of the consideration process. Birds are intelligent, amazing animals that deserve a long, healthy, happy life. If you determine one will fit in with your lifestyle, enjoy your new feathered friend.

Handy information for Becoming a Macaw Breeder

When properly trained, macaws are delightful pet birds to have: intelligent, colourful, and able to talk! Breeding macaws, though, is a serious business that needs commitment by the breeder. But with due diligence and determination to see baby macaws, you too can learn how to breed macaws.

Get a Male and a Female Macaw

Unlike other bird species, macaws are monomorphic... meaning male and female macaws look alike. Make sure you get a male and a female macaw by buying “proven pair” macaws from reputable breeders. If you have macaws at home to begin with, have it sexed by an avian vet through DNA testing. DNA sexing is the most accurate way to determine a macaw’s gender.

Buying Guideline

Especially if you’re buying another macaw to bond with your macaw at home, you have to order a thorough health check for the new macaw. Request the seller to show recent certificate of complete physical, blood work, and culture of the bird’s throat and vent to prevent infecting your macaw at home with nasty bird diseases. If the seller is not willing to cooperate, find another seller or have your own vet check the bird before bringing it home. Your vet should be able to tell you the age, state of health, and correct gender of the macaw you’re planning to buy.

Bond the Breeding Pair

If you’re lucky, you can buy a “proven pair” that’s already bonded and ready to mate. But if you’re buying another macaw to bond with your macaw at home, it’s time to play matchmaker.

Although it's possible to strike love at first between two macaws, it's best to be patient when paring them. Start by placing the bird's cages side by side. Adjust their perches to be level and in line with each other to create the illusion of sharing the same perch. It's okay to give a little distance between their perches, which you can slowly decrease through time until the perches are adjacent with each other but still in separate cages. When you see the two mutually feeding each other through the cage, it's time to join the bird in one cage.

Prepare the Nest

Prepare the nest because it's not going to be long before the pair can use it. In the wild, macaws nest in cliff crevices or tree hollows. In your house, your breeding pair is happy to use an oak barrel or a rectangular wooden nest box measuring 12x12x36 inches.

If you use an oak barrel, remove the top and replace it with removable lid. Punch a hole in the middle just enough for a single parrot to comfortably enter and exit. If you use the wooded nest box, fashion a hinged door near the bottom just enough for you to comfortably check the baby macaws inside. But, make a separate bird hole in the middle for the breeding pair to use as its door.

To prevent the breeding pair from jumping from the bird hole to the bottom of the nest, install a steel ladder where the breeding pair can use as stairs to go up and down the bottom of the nest. The nesting material should be wood chips (not pine or cedar) and small twigs you can gather from nearby woods. Encourage the breeding pair to participate in constructing the nest. Place a soft tree branch in the nest which the macaws can shred and make into nest material. Don't forget to remove what's left of the branch after the construction.

Parent Rearing Baby Macaws

For a newbie, it's best that you let your parrots incubate and rear its offspring. Just supervise if the baby parrot is properly fed and taken care of by the parents. Macaws have strong parenting instinct to know how to care for their offspring from egg to adulthood. You don't have to interfere in most cases.

Hand Rearing Baby Macaws

However, there are instances when the "proven pair" is not able to rear its young. In this case, you can take the eggs or the baby macaws from their parents and hand rear them yourself. Except for

hyacinth and green wing macaws, macaw baby formulas are now available from pet bird stores or from your vet's office. You can ask a veterinary technician to show you how to hand rear baby macaws to properly care for your fids (feathered kids).

Minimum standards for animal rights, for Macaws

Animals must be protected from distress or injury caused by other animals. Animals must be protected from distress or injury caused by interference by people. Different species must not be housed in the same animal enclosure, except for compatible species of birds; compatible species of fish, or compatible

rabbits and guinea pigs where the minimum cage size conforms to the minimum requirements for rabbits. Animals that may be distressed by the presence of other animals must be housed in a manner that prevents visual contact.

Any animal that is exhibiting symptoms of stress, for example due to excessive viewing or handling, must be removed from public view/access and monitored. Procedures must be in place to ensure that all animals receive the appropriate level of daily attention/inspection, feed and exercise over non-trading days.

Animals must receive behavioral enrichment, recognizing the physiological status and special needs of differing ages and species, to ensure good psychological health.

Animals that are unable to feed themselves must be kept only where adequate facilities and expertise are available for artificial rearing.

Guidelines

All equipment that may affect the welfare of animals should be designed and maintained to minimise the risk of illness or injury.

Animals that may be distressed by the presence of other species of animals should be housed in a manner that prevents olfactory contact. Positive efforts should be made to socialize animals to humans and other animals.

Animals that have been well-socialized when young may make better pets.

- Macaws purchasing at a glance-Bird selection and buying
- The breeding process/Breeding Macaws

- **Breeding Macaws in Captivity**
- Macaws are very special and expensive birds and breeding Macaws is a delight; their chicks are exquisite and charming.
- For the process to occur properly and safely owners need to be able to determine the sex of their birds, know if the pair is right for each other and provide everything that these birds will need for a healthy life style to produce healthy off springs.

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- **Breeding Age**

- Macaws reach maturity at 3 to 4 years of age, and can be paired with the opposite gender to start the breeding process. In this age Macaws are emotionally stable and are mature enough to understand how to react to the opposite sex and they are able to get along with the other parrots easily for the purpose of breeding and pairing.

- **Breeding Pairing**

- Macaws must be paired when they reach the age of 3 to 5 years. Pairing is usually done by keeping the parrots side by side in separate cages for some time. This way the parrots can get to know one another and then after few weeks they can be paired together in the same cage. If two Macaws do not show any signs of distress towards the other and sit side by side easily then they are perfect for each other.

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- Macaws should only be paired with Macaws of the same breed to avoid complications in the off spring. Also health of the pair must be checked to attain healthy off springs.

- **Breeding Process**

- After determine the sex of Macaws they should be allowed to bond with each other. It will help if a nest box is purchased for the couple; 8 inch of bedding material should be placed at the bottom of the nest box. These birds should then left be alone where the male will dance around the female to attract her and they soon will mate.

Difficulty in Pairing up

When Macaws seem difficult to be paired together, owners must make sure that there is more interaction between the birds paired so that with time these birds may get along to avoid issues in their pairing or breeding. If there are no off springs produced by a pair, give the pair some more time to live together. Breeding Macaws could test owner's patience sometimes as birds are not ready to mate until a long time. In this case, the birds should be kept together to develop strong bond and liking for each other.

The Macaw growth rates

- **The hybrids of Macaws and ----hybridization**
- **Advanced Macaw handling-trainers, sitters, groomers,labs,culture and microchips**

Chapter 5: HOW TO FEED MACAWS

- **Feeding equipment and feeding habits**

About Scarlet Macaws

These brilliantly conspicuous birds, as their names indicate, are crimson in color -- specifically on their shoulders and heads. Apart from red, scarlet macaws also display a variety of other colors, including blue on their tails, yellow on their backs and white on their faces. Their limbs are black. Body length is typically just over 35 inches. Scarlet macaws generally tip the scales at just over 42 ounces. Natural habitat-wise, these parrots are usually found in wet evergreen forests, up amidst the foliage of the trees. They are highly social and usually are seen in sizable units with other individuals. When kept as pets, they require a lot of attention from their caretakers. Scarlet macaws are generally considered to have sweet and friendly temperaments.

Diet as Pets

If you have a scarlet macaw as a pet, it is crucial to make sure he always eats a diet that is catered exclusively to his species' needs. Scarlet macaws require basic dietary elements such as commercial macaw pellets, whole grains and fresh produce. As "once in a while" treats, nuts are acceptable in tiny amounts. Before offering your pet

pellets, speak to a veterinarian to ensure that the formula is indeed suitable for scarlet macaws. After all, pellets are the bulk of his diet. Some fresh veggies and fruits that are safe for these birds include carrots, apples, pears and broccoli. Only offer your scarlet macaw foods that a veterinarian has confirmed as safe.

Wild Diet

Scarlet macaws out in their natural roaming range feed heavily on nuts, stems, fruit, flowers, bugs, nectar, snails, seeds and foliage. Snails and bugs are beneficial for the macaw's protein content. Their pointy and angular bills make deconstructing tough seeds a rather easy job. They tend to gravitate toward fruit that is not yet mellow. Since these kinds of fruits have harder textures, they are difficult to eat for many other creatures -- but not for scarlet macaws, thanks to their big bills. Scarlet macaws focus on these fruits as a means of eliminating feeding competition.

Clay

Wild scarlet macaws also, strangely enough, feed on a lot of clay, which they retrieve in riverbanks. By doing this, they gain the ability to consume poisonous and unripe foods that other species can't. When scarlet macaws eat fruit that isn't ripe, they often take in chemicals. Clay, however, is believed to counteract these dangers.

- **Diet and nutritional needs with age gaps**

Macaw Care/Feeding Proper bird care for Macaws involves more than just the Macaw diet. The lists below cover Macaw foods and supplements as well as details about feather maintenance with bathing and grooming.

Macaws are a very high energy bird and for good health they will need plenty of good foods rich in oils and calories. In the wild the larger Macaws eat a variety of palm nuts while the smaller Macaws eat seeds, nuts and fruit. Each macaw, depending on its size, will eat about 1/2 - 3/4 cup of parrot mix and about 1/2 - 3/4 cup of fruit and vegetables.

Macaws

Bird Food

- Foods available for Macaws include formulated diets, either pelleted or extruded, seed only diets, and parrot mixes which offer a mixture of both. There are pros and cons to feeding only a formulated diet as well as feeding only a seed diet.

- **Formulated Diet**

- A formulated diet provides a good nutritional base so does not require the addition of vitamins, however it does not contain the phytonutrients (antioxidant pigments) that are found in vegetables, fruits, grains, and seeds. Phytonutrients are believed to boost the immune system, help a body to heal itself, and to prevent some diseases.

- Also, parrots can become bored with it due to the lack of variety.

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- **Seed Diet**

- A seed only diet offers much more variety but requires additional vitamin and calcium supplements. Macaws need not only nutritional requirements met but also variety for psychological enrichment.

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- A Macaw diet consisting of a good parrot mix which includes formulated foods, a variety of seeds, dried fruits, and nuts is generally regarded as a suitable base to provide nutrition and variety. Along with this, provide a daily supplement of fresh fruits and vegetables.

- **Supplements**

- Fruits and vegetables

- Supplemental foods include all types of fruits such as apples, pears, plums, cherries, grapes, oranges, bananas, mangos, papayas, and even berries such as strawberries and blueberries are enjoyed. Many vegetables including carrots, sweet potatoes, cucumbers, zucchini, dark green leafy veggies, many garden vegetables, and even dandelions and chickweed are good. Do not feed avocado as it may be toxic to birds!

- Treats: Offer nuts for treats, such as macadamias, walnuts, pecans, almonds, and filberts.

- Proteins: Additional proteins can be offered such as sprouted legumes and cooked chicken or meat.

- Grit: Grit is not considered essential as macaws will shell their seed before eating it.

- **Water:**

- Give your macaw fresh drinking water every day.

- **Bird Baths**

The personal hygiene of your Macaw includes a regular bath or shower for good plumage and skin condition. One way to accomplish this is with either a hand held shower sprayer or a hose with a fine spray head and lukewarm water.

- **Routine feeding of Macaws**

Food and water utensils: Heavy duty stainless steel is the preferred material for these utensils. Some large birds such as cockatoos and macaws often like to play with the feed bowls and tip the contents on to the floor. There are a range of commercially available feed utensils that are mounted in the door or a wall that allow the feeds and water to be topped up with out entering the aviary or cage. Many of these commercial units have a few "tricks" incorporated into the design to prevent birds from tipping the contents and using the utensil/s as toys.

Modern automatic waterers (or drinkers) are cheap and reliable. Many are bird tamper proof and will refill the water on a pre-programmed schedule. Regular water changes are good on hot summer days

- **Monitoring the Macaw feeding-normal and anomalies**

- **Types of feeds-commercial / own formulations**

Feeding / Diet

Macaws and other types of birds like a regular routine and appreciate a predictable mealtimes throughout the day. Sudden changes in a bird's diet may cause digestive upsets especially toyoung ones that have attained flight recently.The foods need to be varied to avoid boredom and to allow for seasonallyavailable delicacies. Phase in new foods.

All the feeds do not have to be in the same place (in the food bowl) everyday. Fruits, nuts, berries etc can be placed in different places within the aviary so the birds have to spend some time and exercise to find them. Finding a "hidden" food item is a mental and physical activity that birds do naturally in the wild. Just check that items such as perishable fruits, berries or vegetables have been found and eaten. Removing uneaten perishable foods on a daily basis. Whole fruits or whole vegetables can be offered to the birds as well as the usual diced, bite sized items. Large parrot type birds can have fun

munching into items such as a whole apple or a whole carrot. After all, that is the way they find most of their fruits and vegetable matter in the wild.

Feed time should meet the physical, psychological and emotional needs of the birds.

The fruits, vegetables, and flowering plants should be varied from day to day to give the birds a wide as possible variation in daily food intake. Varying the foods daily also changes the visual appearance of the foods.

Varying the foods daily also changes the predictability of the foods.

Human diets now state we should regularly eat fruits and vegetables from different color groups, so could the same principle apply to birds diets? The theory being the different color groups may offer subtle differences in the mineral, vitamin and nutritional contents of the different foods.

Feeding can be a source of exercise and entertainment as well as nutrition. Corn-on-the-cob can provide hours of "fun" chewing on the corn kernels and then the cob. Commercial pellet feeds can come in various shapes, colors and flavors.

In the wild a macaw diet can include Palm nuts. The larger macaws can relatively easily crack open the Mauritia species nuts and eat the contents. Other items in the macaw diet include a variety of fruits, berries, leaf and flower buds, figs and a variety of seeds. In the wild some species of macaws visit the clay banks to consume the mineral rich soil. The clays are thought to

neutralize some toxic compounds in their diet. The clays may also supply some minerals and trace elements necessary for a balanced diet.

A balanced aviary diet should consist of a variety of fruits, vegetables, green leafy vegetables and green stuffs with a range of nuts plus a quality standard seed mix. The seed mix to include sunflower seed and other seeds as listed below. Sunflower seed can make up about 40 % of the seed diet. Macaws will adapt to commercial pellets as part of a balanced diet. Other food items are listed below.

Fruits: Apple, banana, grapes, orange, pear, plums. (Some types of avocado can be toxic to birds)

Vegetables: Carrot, celery, corn, corn on the cob, cucumber, peas and beans, spinach, silver beet leaves and the stalk. (Onions can be toxic to birds)

Berries: Most berries people eat will be eaten by macaws and parrots. Examples are strawberries, blueberries, blackberries and raspberries.

Nuts: Almonds, Brazil, hazel nuts, peanuts, pine-nuts, walnuts, pine cones. Nuts with a hard shell may have to have the shell cracked or removed to allow the birds access to the kernel.

Seeds: Canary seed, corn, hulled rice, millets, oats, pumpkin seeds, sunflower, safflower, wheat. Some of the larger macaws do not bother with eating the smaller seeds such as the canary and millet seeds, preferring the larger sunflower and safflower seeds.

Branches: (Safe non-toxic) Branches with nuts, flowers, berries, fruits, seed pods, leaf and flower buds attached. There are hundreds of eucalypt and native species around Australia that are used by parrot breeders that should be suitable for macaws. Seek local professional advice to ascertain which plants and trees are safe and suitable. Seek local professional advice to ascertain the correct identity of all plants placed in an aviary. If in doubt, leave it out.

Green foods: Various seeding grasses. Many birds will eat "weeds" such as Chickweed, dandelion. The flowers, seeds, leaves and sometimes the roots may be eaten. Green leafy vegetables such as endive, silver beet are usually available year-round and eagerly consumed.

Sprouted or soaked seeds: Optional extra if time and hygiene criteria are met.

Insects: In the wild many macaws and parrots consume insects as part of their food intake. Insects are a good source of easily digested protein.

Insects such as mealworms (larvae, pupa and beetle stages), grubs, and wingless crickets can be offered to the birds especially at breeding time.

Commercial Pellet diet: Commercial pellets are becoming better quality and more nutritious and may form part of a balanced diet.

Calcium: Quality commercial liquid and powder calcium supplements are available to add to the diet when required. Advice from an Avian veterinarian should be obtained prior to adding calcium and / or mineral and vitamin supplements to a good diet as these products can be toxic if given in too large a dose.

Mineral and Vitamins: Quality commercial liquid and powder mineral and vitamin supplements are available to add to the diet when required. Advice from an Avian veterinarian should be

obtained prior to adding calcium and / or mineral and vitamin supplements to a good diet as these products can be toxic if given in too large a dose.

Supplements: Bread, biscuits. Pasta. Dry commercial dog foods. Overseas breeders often feed macaws porridge.

Commercial egg food mix, commercial egg and biscuit mix, or homemade egg mixes should not be fed to birds.

Food and water utensils: Heavy duty stainless steel is the preferred material for these utensils. Some large birds such as cockatoos and macaws often like to play with the feed bowls and tip the contents on to the floor. There are a range of commercially available feed utensils that are mounted in the door or a wall that allow the feeds and water to be topped up with out entering the aviary or cage. Many of these commercial units have a few "tricks" incorporated into the design to prevent birds from tipping the contents and using the utensil/s as toys.

Modern automatic waterers (or drinkers) are cheap and reliable. Many are bird tamper proof and will refill the water on a pre-programmed schedule. Regular water changes are good on hot summer days.

● **Toxic foods to avoid for Macaws** **Safety precautions**

The following list of precautions does not cover every possibility of danger to macaws. Pet keepers are advised to see the dangers and if possible, print the most probable ones and attaché them to the first aid kits. It is also wise to share similar cautions with the bird sitters in case you take some lengthy time off or vacations.

*foods that are dangerous to birds include avocado, guacamole, chocolate, cocoa, alcohol, caffeine, the pits of apricots, peaches, plums, prunes, and seeds of the cherimoya fruit, as well as foods containing large amounts of salt, sugar, grease, preservatives, artificial coloring, and other additives. Obvious dangers such as moldy foods and under-cooked or raw meat should be avoided. Parrots should be fed the same quality of food that is suitable for human infants.

*ptfe treated products, such as teflon and other name brands of non-stick cookware kill birds by releasing odorless, deadly gases only when overheated. Ptfе is used in some space heaters, ranges, ovens, stove-top burner bibs or liners, heat lamps, irons, griddles, bread makers, woks, waffle makers, electric skillets, crock pots, popcorn poppers, coffee makers, roasters, curling irons, hair dryers, and more. Check labels before purchase.

*self cleaning oven that use extremely high heat to burn off oven debris, and in the process create toxic fumes that can harm or kill parrots.

*cooking bags, especially those treated with ptfe emit harmful fumes during cooking that kill birds. Avoid the substances that releases smoke and/or fumes when heated should be avoided in bird homes.

*kitchens should be out of bound for birds , especially when cooking is in progress.the most probable hazards of open flames, hot ranges, open pots of hot food or boiling water are as deadly as smoke or other toxic fumes, even from dishwashers if a plastic item falling onto hot surfaces.

*cages should be made of safe metallic materials that have non-toxic paint, no sharp edges and with proper spacing for cage bars , this is to prevent strangulation.

*leg bands can cause the loss of toes, feet, and even life in extreme cases. The installation of microchips are a safer forms of identification of lost birds. The use of split leg bands, that have a gap can be put on at any age, and preferably removed by a vet

*imported ceramic crocks often contain toxic metals that can infiltrate into bird food and water. This is the reason that stainless steel, pyrex and other glass is safer.

*halogen light fixtures such as torchier-style floor lamps create extreme heat and can harm or macaws that land on them. It is advised to choose only bird-safe light fixtures for bird homes.

*litter made of walnut shells and corn cobs can cause life-threatening

Impaction if the bird swallows them. Their fermentation may also host fungal spores due to persistent wetness. Newspapers are a better and a safer.

*metal based compounds composed of substances of lead, zinc, copper, and iron can cause metal toxicosis if ingested by birds. Some sources are house keys, galvanized wire meshing, lead-based paintings, metallic paintings, paints containing zinc, linoleum, vinyl mini-blinds, foil from champagne and wine bottles, lead weights, bells with lead clappers, stained glass, some improperly-glazed ceramics, costume jewelry, mirror backing, copper pennies, zinc oxide, artist paints containing cadmium, and cardboard or paper with high gloss inks. Aviary wires treated with zinc is also dangerous unless it is properly scrubbed with detergent and then washed with vinegar. Cages from chinese origin may contain lead and should be avoided.

*quik-stop and other styptic products should never be attached to avian skin. They are safe for bleeding toenails when broken but they destroy the skin. For broken or pulled blood feathers, either ofcornstarch and or flour are safer. Aloevera gel can be applied first to help the flour or cornstarch to adhere to the wound and also to help with pain and healing.

*cats, dogs, ferrets (and many other pets) are a dangerous to birds. A slight cat scratch can infect birds with pasteurella bacteria and Immediate vet treatment should be administered for the birds survivor. The best way is to never allow birds to interact with other pets without close supervision.

*flea collars and sprays emit toxins into the air and should not be used in homes with birds. Lice shampoo also contains dangerous toxins and should never used on birds also.

*pesticide sprays, no-pest strips, and foggers poison the air and can kill birds. Safer solutions are either roach traps, ant bait, and other solid insect poisons that can be safely secured in the back of cabinets and other areas that have limited access by the birds. Sprayed fields should not be accesses by birds as, they may feed on the insects killed by the chemicals, causing harm to them.

*sticky strips for flying insects should always be enclosed in old cages or other containers accessible to insects but out of the reach of

birds and other pets. Citrus oil or peanut butter can be used to safely remove sticky substances from birds feathers.

*wing clips should be checked on the first day of every month to prevent flight-related accidents. Wing-clipped birds can often fly well enough to escape so they should be protected by extra means whenever outside.

*transparent and reflective surfaces like glass windows doors, and mirrors should be introduced to birds earlier as they attain flight age.the young birds can be trained to avoid large shields of clear glass by repeatedly holding the bird on your hand and imitating flight toward the glass and then lightly pressing their beak, feet, and body against the surfaces.

*ceiling fans should not be used in homes of with macaws that can fly around.

*the list of other probable dangers to birds is limitless but the open windows and doors, hot pots and stove burners, open containers of water (sinks, toilets, tubs, boiling water), poisonous or thorny houseplants, electrical wires, medication, insect bait traps, and many other toxic substances.

*toys, within reach to the birds ,both new and used, should be cleaned and examined for loose parts that could lodge in a bird's throat when swallowed. Loose strings and threads can trap and cut off circulation around the necks, wings, legs, and toes. Use of only stainless steel (not zinc) "quick links" as toy fasteners is recommended and strings, chains and ropes are discouraged as they may wrap around the neck or feet.

*wood shavings specifically ones for cedar and redwood are toxic to birds and should not be used within the cages, aviaries, or nest boxes. Old newspaper are safer cage lining while pine or aspen shavings are safer nest box.

*pressure treated lumber, conventional plywood, and particle board contains variety of toxic substances.it is better to opt for untreated pine boards are a safer choice.

*house hold plants and chemical fertilizers can poison birds and should ideally be kept out of their reach. Amongst them, the most common poisonous houseplants are azalea, oleander, castor bean, sago palm, yew plants, dieffenbachia (dumb cane), asparagus fern, daffodils, flower bulbs, mistletoe, poinsettia, philodendron, and potato sprouts or "eyes". It is advised to remove or purchase houseplants that are proven to be non toxic to birds within the homes.

*cigarettes, cigars, pipes, and other smoking substances should never be used in air space shared by birds. The passive inhalation of smoke, even from the burning of incense can cause severe damage the sensitive avian respiratory system including the eyes and skin. Nicotine can settle on perches and other cage surfaces and cause the self-mutilation of feet and legs in sensitive birds, (allergic reactions).

*essential oils and potpourri oils should never be used in the breathing space of parrots. Perfume, hairspray, and other aerosolized grooming products can damage the avian respiratory system.

*air fresheners, this include the assortment of artificial plug-in air fresheners and scented sprays are considered unsafe. Bird deaths from using febreze in the homes have been reported so until new research proves it safe, do not use it in bird homes. To safely freshen the air within bird homes, simmer spices like cinnamon, cloves, vanilla, and citrus rinds and provide fresh outdoor air whenever possible.

*strong scented candles release toxins when burned so only unscented ones should be used in a home with birds. It is good to be aware of the open flames. Beeswax candles are generally safe and unscented but care should be taken to avoid imported ones with lead wicks which emit toxic gasses when lit.

*carpet powders and sprays such as carpet fresheners, as well as similar treatments for upholstery (like febreze), often contain toxins which are dispersed into the air when they are vacuumed so they should never be used in homes with birds. Carpets can be cleaned

adequately with mixtures of water and baking soda, vinegar, or grapefruit seed extracts.

*cleaning and disinfecting products like pine oil, ammonia, mold and mildew cleaners, toilet bowl cleaners, drain cleaners, furniture polish, oven cleaners, dishwasher detergents, furniture polish, car cleaning products, and laundry products, including bleach, can cause severe irritations to bird skins, eyes membranes and respiratory systems of birds. Starch should be avoided as it is also toxic to birds.

*home improvement products that create fumes including fresh paint, new carpet, drapes, furniture fittings and flooring materials that uses toxic glues. The emission of toxic chemicals from new furnishings, paints, solvents, adhesives, various finishes, and other building materials are sometimes described as the "new smell" and can damage the avian respiratory system.

*common medication and natural remedies containing tea tree oil, which contains the oil of the melaleuca tree, as well as all over-the-counter medications should be kept out of the reach of parrots.

*mold on food or in the air is dangerous to parrots. Aspergillus mold can cause the deadly disease, aspergillosis. It can grow on improperly handled and stored foods, especially grains such as corn. Excessive moisture in bathrooms promotes the growth of various molds in homes.

*carbon monoxide which is an odorless, colorless, tasteless gas produced by incinerations with inadequate aeration. Birds in poorly ventilated aviaries may have heat surges and risks of carbon monoxide poisoning. It denies blood of the crucial oxygen and can be particularly harmful to animals and humans with heart ailments when inhaled at levels often found indoors. Carbon monoxide is heavier than air and very risky in poorly ventilated areas.

*dry cleaned clothing is recommended to be air dried outside or in an airspace which is not shared by birds, this is to be done

until the clothing have no remaining odor. The chemical "perc" (perchloroethylene) causes cancer in lab animals.

*mothballs and /mosquito moth-repellent cakes and crystals contain the chemical paradichlorobenzene which is carcinogenic. The same chemical is present in it also is found in toilet cleansers and deodorizers, it causes cancer in lab animals.

*disease exposure management should be avoided by quarantining all new birds from your existing flock or companion birds for one to three months under keen observation. While the taking of birds to pet stores, bird fairs, swap shops and other bird gatherings can be enjoyable and income generating, it comes with an exposure risk to the contracting and transmission of deadly and incurable diseases.

*human saliva contains pathogens that are deadly to birds, especially if the source is from a sick person. It is advised never to allow a bird to place its beak in your mouth, ear or nose, nor to "clean your teeth".

*cleanliness is important to the prevention of a majority of the bacterial infections. Washing hands frequently when working with birds and specifically when preparing their feeds, water troughs and dishes.

*boarding birds with other birds especially those with unknown health status is an unnecessary risk to healthy birds. Preferably, it will be safer to have a friend or relative come into your home or keep your birds in their home during your absence.

*emergency information and instructions should be left with your caregivers when you are away. Leave your vet's contact information as well as hotline numbers near the phone and advise your caregiver about potential emergencies and what to do in each case.

- **first aid tips during feed poisoning for macaws**

Chapter 6:KEEPING MACAWS IN GOOD HEALTH AS PETS

Pet birds are totally reliant upon us for the proper environment and its maintenance for their wellbeing. If the situation is unsatisfactory they are unable to fly elsewhere, hence-it is our total responsibility, and a great one, as the life of a living creature is in our hands.

The Environmental Surroundings of the Bird

The Cage is the birds homeshould be as pleasant as possible with proper size for the variety of bird you intend to host.Ideally speaking, no cage is large enough; however, gigantic cages are not necessary.

Cage Materuials:

The cage should be constructed of a material suitable for the Macaws since they have very strong beaks. It must be of sturdy construction for the larger birds as they can easily dismantle a cage designed for a smaller bird. Proper bar spacing is very important, particularly when a smaller bird is placed in a large cage (to avoid strangling).

If galvanized metal is present in any of the components of the cage be aware of the new wire disease, which is a frequently encountered heavy metal poisoning caused by the zinc compounds in the wire. Galvanized wire and clips used to construct cages or galvanized containers and dishes, which are not properly treated, are common sources of zinc.

Birds suffering from new wire disease may show problems with, drinking and weight loss,exhibit weakness, anaemia, cyanosis and seizures. A blood sample checking for zinc levels can confirm the disease.

Cage Height:

There should be the availability to climb to a high perch, preferably outside the cage. A bird feels secure in higher positions and likes to assume a dominant position above where it is less threatened. Where does a frightened bird go? As high as possible to reach a position of safety. After taming this is less evident, except for instance, if strangers are around. With birds that are very aggressive and dominant it may ease some of the aggression if the bird is not allowed to achieve the higher ‘dominant’ position.

Cage Privacy

Some birds prefer having a retreat where it cannot be seen. Partial covering of the cage or a box inside the cage may help. This is especially important with new and nervous birds.

Freedom

It is of extreme importance for birds. It is recommended that definite periods of time are set aside daily to allow the bird to have freedom outside the cage. Some cages are designed so that they can be opened on top or allow the placement of a 'playground' on top of the cage. A perch or T-stand where the bird is outside the cage and can interact is also recommended.

Birds in cages seldom have a chance to socialize/interact. Caging narrows the bird mentally and thus has the effect of taking away its friendliness, curiosity, activity and gradually dulls its inclination to socialize, to eat a variety of foods and take proper care of its feathers

Bird Cages for Macaws

Macaws are the giants parrots and as a setback, it can be challenging to find an adequate cage to house a Macaw specifically. Given that Macaws have long tails and a wide wingspan, it's crucial to purchase a bird cage that is large enough to allow them to move within freely without damaging their wing feathers. Again, the Macaws have strong beaks and toes, hence, the overall strength of the Macaw bird cage, bar gauges and spacing should be among the important considerations.

Smaller Macaws like the Yellow-collared or the Hahn's, the recommended minimum bird cage size of 34" wide, 24" deep, and 36" tall, with bar spacing of 3/4 inch to 1 inch. Larger Macaws like Military Macaws, Blue & Gold Macaws and Green-winged Macaws, the recommended minimum bird cage size of 36" wide, 48" deep, and 60" tall, with bar spacing of 1 inch to 1.5 inches.

A generally recommendation is the dome top style bird cages over play top bird cages for two reasons 1) dome top bird cages offer more interior spacing, and 2) the placing of large parrots above you on a play top puts them in a dominant position, which can raise issues

with aggressiveness. A point to note is that this book has given minimum bird cage size recommendations, but for Macaws whose natural habitation is a free rainforest, your Macaw will appreciate the largest Macaw bird cage you can afford.

The stainless steel bird cages are a good choice for these majestic parrot for their well-built, durability that will stand up to the Macaw's powerful beaks and claws. The steel-made bird cage will provide safe, secure housing for your Macaw for years to come.

Aviaries are also offer good choices for large parrots such as Macaws, With super-size bird cages(aviaries),which may be easier for the owner to mimic a more natural environment for the Macaws.

If stainless is way too expensive, there are other materials around that can be domesticated for the cages, of course with considerations for security, comfort and health.

For keepers, Inadequate room space causes Macaws to react destructively as a result of boredom and other forms of stressors. Hence note that buying the right size Macaw bird cage goes a long way in providing quality of life for both you as an owners and your feathered friend too.

Cage Accessories

Perches

The bird spends its entire life on a perch. The goal should be comfort and prevention of foot problems. The perches should be made of an easily washable material and thoroughly cleaned regularly. They may either be scraped or washed.

Diameter-.A bird on perches of all the same diameter is likely to develop foot problems. A variety of sizes seems advantageous so there is more even wear on the feet. It is recommended to use both large and small diameter perches.

Types-Many different types of materials can be used for perches. Common perches include plastic perches, dowel rods, flat perches, swings, string, clothesline, padded perches, rope perches, rubber

tubing, PVC pipe and sticks or branches from outside. Branches from the outside make great perches; however, they should be from non-poisonous plants and well-scrubbed. Macaws like to chew on their perches so bark is eagerly peeled from branch type perches.

Hard and soft perches-Birds in the wild do not sit on the same diameter hard perch. Be certain a soft perch is available, such as rubber tubing, rope or padding a perch with paper towels or moleskin.

Cement Perches-These perches are helpful in keeping the beak and toenails from becoming overgrown if the bird uses the perch.

Cage papers/Lining:

Paper is recommended for use on the bottom of the cage, as the droppings are more easily monitored as to their number and appearance. The bedding must be from a reputable source. Dusty/dirty bedding may be a potential source for fungal (*Aspergillus*) or bacterial (*Klebsiella*) contaminants.

Nesting Material

Nesting material composed of fine threads should be avoided as it may wrap around the toes or legs and acting as a tourniquet, cutting off the circulation. This may lead to deterioration (necrosis) and loss of toes. The aroma is too overwhelming in a small area and can be toxic, possibly leading to death.

Seed and water cups

The cups should be made of an easily washable material and manufactured from material that can withstand cleaning and disinfection. Ideally they should be cleaned daily to minimize bacterial contamination. Strategic placement of the cups in relation to the perches can also be accomplished to minimize this risk as well.

Food

All foods and seeds made available to birds should be clean, fresh and from a reputable source. Avoid spoiled foods and moldy or dirty grains, which may be a possible fungal source. Food should be stored in an area that is not damp or dusty. *Aspergillus* (a fungus) is a risk in such an environment.

Grit

The use of grit is another area of controversy. Its recommended use is only periodically as it is not continually required in the cage. A bird will retain grit in its gizzard and does not need to have it replenished daily. Actually pet birds do not usually need grit for normal digestion. It should be placed in a separate cup so that its intake can be monitored. A bird that has an excessive intake of grit could indicate a problem. A constant source of minerals is required and plain grit is not that great of a source. Good mineral supplements include, cuttlebone, mineral block, crushed eggshells, crushed oyster shells, bones and commercial mineral preparations.

Cage Toys

Bird toys should be suitable for the particular variety of bird. For some birds having toys available is very important. Large birds can easily dismantle or destroy toys designed for smaller birds. Glass mirrors are hazardous to large birds. Many birds have been impaled on hooks used to secure certain toys. Avoid toys with bells for larger birds as they can easily remove the bell and have it become lodged on the beak.

Chewing/chew toys-The beak of the bird grows constantly. For example, a parakeet beak grows several inches a year. The beak is worn down by eating, play or chewing activity. A bird that does not chew enough will have an overgrown or excessively flaky beak. Examples of good chew toys include: commercial chew toys, rawhide chews, cuttlebone/mineral block, lava rock, branches from outside, cardboard, paper towel rolls (insert), wooden clothespins, bones, pine cones, white pine wood (perches or scraps) and rope to name a few.

Cage covers

These are important for the bird's well being. A bird is a slave to light. Pet birds probably require the same amount of light and dark that occurs in a natural day. Inadequate amounts of rest will have the same effect that it has on humans. The bird should have at least 8-10 hours of darkness every evening. Cage covers have two purposes: they darken the cage in order for the bird to rest and help keep the cage warm if the temperature drops at night.

The Environment Around the Cage

Location

of the cage-Birds are generally happiest and do their best in areas of activity. Place the cage in an active area of the house, such as the family room. Direct sunlight is stimulating and enjoyable to birds; care must be taken not to overheat them on a summer day. Outside walls, depending upon the temperature outside and the amount of insulation, may cause undue exposure to cold.

Temperature

Under their covering of contour feathers, birds have a layer of down to keep them warm. A healthy bird can tolerate a change of temperature of 10-15 degrees.

Humidity

An ideal humidity for a bird seems to be 30-50%.

Dangers in the Household

Exercise caution whenever birds are allowed freedom in the house. Many seemingly innocent common household furnishings can be dangerous. If no one is at home to monitor the bird, it is best to keep it caged.

Windows/Mirrors

Windows and mirrors do not appear to be a barrier to flying birds. They may unwittingly proceed headlong into them, possibly causing severe injury or loss of consciousness. If the birds are able to fly free try to keep these surfaces covered.

Open Doors/Windows-

The danger is obvious. The loss of a pet bird is not uncommon due to this and can easily be avoided if proper precautions are taken.

Open Containers of Water-

The risk of drowning exists whenever there are open containers of water. Birds have drowned by falling into sinks, commodes, pots of water.

Ceiling Fan

These can cause serious injury to flying birds. Surprisingly injuries from this occur much more frequently than anyone would imagine.

Loud Noises

Birds do have sensitive hearing so that loud noises can cause stress, leading to lowered resistance to infection or emotional problems such as feather picking.

Other Pets in the Household

Attacks by other pets in a household are a very frequent cause of injury for pet birds. Pets relish the attention of their owners so that sometimes jealousy can motivate them to attack one another.

Cooking Food- Hot cookware, hot food and hot range tops can be dangerous. Remember, even though a burner is turned off it still remains hot enough to blister the feet of a bird for some time. A good rule is to keep the bird away from the range while there is cooking going on.

Potentially Poisonous Compounds for Pet Birds-

Birds are particularly sensitive to many chemicals due to their small size and very efficient metabolism.

Lead Poisoning

Lead poisoning is one of the most common poisonings in avian practice. Due to their curiosity, birds will pick up objects, chew and occasionally swallow small fragments. Lead is absorbed into the bloodstream from the digestive tract. It is then carried to the brain and also incorporated into the bone. It can cause nervous system disorders and eventually lead to death. The diagnosis of lead poisoning is through the demonstration of lead in the digestive tract. If lead poisoning is suspected veterinary assistance should be provided immediately. Radiographs will confirm the diagnosis. Blood lead analysis will confirm the diagnosis but results may take several days.

Lead poisoning can be treated if identified quickly. Calcium EDTA is the drug of choice and is given by injection into the muscle. It combines (chelates) with the lead in the bloodstream so that it cannot enter the brain. It is given until there is no evidence of lead in the GI tract or when clinical signs resolve. Mineral oil or peanut butter can be given to aid in the passage of the lead out of the GI tract. Penacillamine can also be used as a treatment for long term therapy, an advantage being that it can be given orally.

Poisonous Plants-

Houseplants can be a problem as birds tend to nibble at vegetation, however actual plant intoxications in pet birds are quite rare. The local poison control center can provide information as to the toxicity of certain houseplants in the home. Veterinary care should be sought if there is a suspicion that a bird may have ingested a potentially toxic plant.

Toxic Fumes-

Birds have the most efficient respiratory tract in the animal world. They are able to efficiently remove oxygen from the atmosphere and into the bloodstream. However, due to this efficiency and their small size, they are more sensitive to toxic elements in the air. Remember that canaries were used in mines to detect gases that would otherwise be undetectable.

Teflon Toxicity

This has been a problem that I have been addressing for the past several years, having written many articles and giving numerous lectures on its danger.

Polytetrafluoroethylene (PTFE) is a synthetic polymer used on non-stick cooking surfaces. The most familiar PTFE coated cookware is marketed under the trade names Teflon, Silverstone and Supra. However, other PTFE coated products are available under other trade names.

Basic Health Care for Pet Birds

Care of the Beaks in Macaws-

The beak of the Macaw keeps growing constantly with age, but with normal activity it should keep wearing down back to the normal size. If not so it then overgrows and requires trimming to maintain it adequately. Sometimes, the beak may overgrow over some reason, which should a sign of an abnormality which may often be due to some disease. Quite common causes of beak overgrowth may be caused by the fatty liver disease. A Macaw keeper should take time with the birds and be a very

careful observer. Noting some of the changes in behaviors may facilitate early diagnosis hence creating greater chances of success in curative procedures. Bird health Practitioners should be cautious during the trimming of the beaks.

Care of the Nails

-Keeping the nails of Macaws nicely trimmed and short will minimize cases of breakage and or bleeding. It is encouraged to give the birds enough space for physical movement which facilitate the wearing down of the nails back to almost ideal size. The checking of the size of the beaks and nails should be monitored constantly and any cases of unusual or rapid growth addresses.

Care of the Feather

-One point to note with bird feathers is that when one has fully grown, it will remains until it is plucked off and the follicle or a grows anew. The process of molting here comes into play where broken and damaged ones are replaced. Some routine bathing with plain water can be helpful, but in more extreme cases a mild dishwashing detergent can be added to the water.

Preening-Preening cleans the new feather and helps to restore feathers and most normal birds spend most of the daytime preening. When the bird is unwell, it may ignore the conditions. Bathing encourages preening. The bathing should be done with plain water by showering or spraying.

Molting-Molting refers to a phase that a bird is regenerating new feathers and shedding the old ones. Upon loss of a featherbone starts developing within two weeks. Baldness is not encouraged and incase it happens, should be evaluated by a Vet. Neither should the birds appear ragged as that points to some deeper problem underlying. It is well for some birds to follow a definite seasonal pattern to their molting period which occurs once to twice a year. The molting process may upset most birds causing stress, which may subsequently render the b prone to infections. Note that the nutritional needs increase during the molting period. Some prolonged periods of molting maybe indicative of disease conditions or some problem

with nutrition. Keepers are advised to minimize stress instances during molting to prevent diseases.

Heat-Guarding against chilling
during cold weather the caretakers should increase the surrounding temperatures. Chilled birds should be assisted via a homemade incubator with a heating pad on the side of the cage in a perpendicular position to the while the cage is covered with light proof clothing. The bird should have the liberty to sit closer to the pad for more heat but be able to move away if less warmth is desired. Alternative sources of heat are infrared light or a 150-watt light bulb could be used as alternative heat sources. In case the cage temperature gets too hot, the bird will start breathing rapidly and will indicate with an open-mouth, drooping wings

Rest-

Allow the birds to rest for periods from 12 to 16 hours of darkness. A quiet area free from disturbance is helpful to enable rest. A cage cover is helpful.

Quality diet and supplementation-

Excellent nutritional support is important during the molt. An advantage feeding a bird a balanced diet such as pellets is that molting will be less stressful due to the quality nutrition that is being provided...Doubling the doses of vitamins is recommended during molting as they play a role in proper development of the feathers as well as boosting immunity during any stressful period. Additional proteins are good for feather development.

Blood Feathers

Blood feathers or pin feathers are new sets of feathers that are growing in during the molt, but can also develop after a feather was plucked entirely out of the follicle.

Whenever a bird is bleeding the source of hemorrhage should quickly be identified. In case it is a broken blood feather then the shaft of the feather should be grasped firmly with fingers or tweezers and pulled out and pressure and clotting powder should then be applied to the feather follicle. Using a cotton tipped applicator

dipped in the clotting powder will aid in applying it in the follicle and also expedites placing direct pressure to the follicle, assisting in hemorrhage control. Some of agents that can be used to stop bleeding include, styptic powder, styptic pencil, silver nitrate sticks, commercial products such as quickstep, morsel's powder (ferric subsulfate), or cornstarch, baking soda and flour.

Care of the Feet

-Infections of the feet can occur despite taking precautions such as proper variety of perches. Be certain that the perches are clean, have at least one soft perch available and vary the sizes of the perches. Any weight shifting, redness, swellings, crustiness or sores on the feet/legs or lameness are abnormal and should receive veterinary care. Unless specifically indicated for treatment by an avian veterinarian no ointments or oils should be applied to the feet and legs. As the bird preens this will tend to spread this material onto the feathers causing them to become greasy or oily. This in turn interferes with the insulative properties of the feathers and in some cases may lead to feather loss.

Care of the Legs

-The sole purpose of the leg band is for identification. Microchips are a safer form of identification of lost birds. Split leg bands, that have a gap in them and that can be put on at any age, should be removed by a veterinarian. If the leg band is necessary then there must be regular evaluation of the banded leg. The leg band should be freely moveable and there should be no signs of irritation, redness or thickening on the leg. Chronic irritation of the leg from the band can lead to swelling which would then trap the band and cause it to interfere with the normal blood supply to the foot

F. Care of the Skin-Since the skin is protected by feathers, no special care is needed. As mentioned before when discussing the feet never apply any oil or grease to the skin/feathers for reasons discussed in the earlier section.

Care of the Eyes, Ears and Nose

-A discharge from any of these areas indicates trouble. The area should be kept clean. Wipe the area with warm water or a mild antiseptic solution. Nothing oily should ever be applied to these

areas unless recommended for treatment by a veterinarian. Discharges from these sites should receive veterinary attention.

Care of the Uropygial (Tail/Oil)

Gland-Not all birds possess this gland which secretes an oily material that is used during preening. However, birds that do not possess the gland preen just fine and if a bird had the gland removed surgically they seem to still preen normally. This gland should be checked annually during the physical examination.

Weight

-Once a bird becomes an adult, the weight should remain relatively constant. Checking the weight occasionally, especially at the yearly physical examination, will provide valuable information of the state of health. Merely looking at a bird will give no indication as to its weight due to the feathering. Feeling the breastbone may give some idea, but weighing on a scale is ideal.

Sex Determination

-This can be difficult and mistakes are made. The reproductive organs of the bird are internal so means are needed other than visualization. Unless for breeding purposes there is real need to know the sex of a bird. Experienced breeders do an excellent job and can sex certain varieties of birds with reasonable accuracy before selling. When needed a veterinarian could verify the sex by a simple surgical procedure where the internal organs are visualized. Surgical sexing is usually performed for breeders who would like verification of the sex of a bird and also an evaluation of the condition of the gonads as well as other organs visualized during the laparoscopic technique. Determining the sex of a bird through DNA analysis of a blood sample has proven to be a safe and effective technique. It is performed by commercial laboratories and is being used widely.

Annual Physical Examination

by a Veterinarian-Birds hide their problems so effectively that they need annual examinations by a veterinarian. This should include a 'hands on' physical examination, weight check and laboratory tests of the droppings and the blood. Yearly reminders should be sent to avian clients to encourage them to come in for the annual physical examination.

Signs of Sickness in Pet Birds

Birds hide their problems very effectively so that when they begin to obviously manifest their illness, they are already seriously or critically ill. Because of this difficulty in detecting illnesses early, it is of utmost importance to the owner to be familiar with the signs of illness. If they recognize any of the signs of illness they should be encouraged to bring the bird in for an examination. Quite often when a bird is brought in for an annual check-up subtle disease changes may be discovered before they cause serious illness.

General signs of illness include:

1. Change in the character of the droppings or a decrease in the number or volume.
2. Change in both food or water consumption
3. Change in attitude-generally observed as decreased activity or talking less, singing less or no response to stimuli.
4. Change in the bird's appearance or posture-a sick bird will generally ruffle their feathers, begin closing their eyes in a sleepy fashion and will be sitting low on the perch (droopy).
5. Any noticeable breathing while resting, heavy breathing after exertion, change in character of the voice and any respiratory sounds-sneeze, wheeze or click.
6. Any enlargement-even fat is abnormal in a bird.
7. Unusual crustiness on the face/beak or feet/legs

Emergency Care for Pet Birds (temporary care until the bird is seen by a veterinarian)

If ever a bird sits with its feathers ruffled, eyes partially closed, droopy appearance or if there are signs of diarrhea or respiratory problems, the bird should be treated immediately. Also, any bird which has been injured, sustained a broken leg or wing, bitten by a cat, dog or other animal, burned or chilled, should likewise be started on emergency care.

Heat/Incubator

– As mentioned in an earlier section, a temporary incubator can be made by placing a heating pad alongside the cage and then the entire

cage is wrapped with plastic (saran wrap) and holes made for ventilation. Sometimes an additional cage cover can be added. An infrared light or a 150-watt light bulb could be used as alternative heat sources. The temperature should be maintained at 80-85 degrees. Should the cage temperature become too hot, the bird will start breathing rapidly, hold its wings out from the sides of the body and the feathers will be held so close or tight to the body that the bird will appear unusually skinny.

B. Droppings-

Start counting droppings. The number, volume and appearance is of great importance to the veterinarian, so save the cage papers and bring them in with the bird for evaluation.

Nutrition/Fluids-

A bird that stops eating dies. Therefore, every effort must be made to encourage the bird to eat. Cups of food are placed adjacent to where the bird is perched, food can be scattered on the bottom of the cage if the bird is off the perch. The veterinarian will immediately force-feed a bird that is not eating by passing a feeding tube into the crop.

To give the bird an extra boost of energy, sugar can be added to the water if the bird is still drinking. Care must be taken with some antibiotics administered in the drinking water as they may cause the water to have an unpleasant taste and the bird may avoid the water and further dehydrate. If possible giving watered down sugar solution by eyedropper to a weakened bird may be lifesaving if the stress of handling is not too great.

Rest

-Sick birds need rest, and thus, should be in a darkened room or covered to insure 12-16 hours of sleep. A two-hour nap in the morning and afternoon is advisable.

Bleeding-

The source of bleeding should be identified. If it is a broken blood feather then the shaft of the feather should be grasped firmly with your fingers or tweezers and pulled out. Pressure and clotting powder should then be applied to the feather follicle. Most bleeding episodes can be controlled with powder to aid in clotting and steady

pressure. Frequent dabbing or rubbing may interfere with clot formation. After the bleeding has been controlled the bird should be placed in a covered cage or darkened room and periodically checked for bleeding. A follow-up visit to a veterinarian is extremely important.

Agents that can be used to stop bleeding include styptic powder, styptic pencil, silver nitrate sticks, and commercial products such as quickstop, monsel's powder (ferric sub sulfate), cornstarch, baking soda and flour.

Grooming Pet Birds: How To Clip Wings, Trim Beaks and Nails, and Bathe Your Bird

Trimming beaks

Bird's beaks normally wear down evenly. If the beak is not wearing evenly, an avian veterinarian should be contacted to examine the bird and determine the reason. The uneven beak should be trimmed to prevent problems with eating or preening.

Trimming nails

Overgrown nails will make perching difficult for a bird as well as increase the chance of catching a nail on carpet or sweaters. A good rule of thumb is that the nails are too long if the toe is elevated off the ground when the feet are placed on a flat surface. Even short nails may need to be blunted to remove sharp points.

There are two techniques for trimming nails. The first uses human nail clippers or dog nail clippers depending on the bird's size. Having a supply of styptic powder on hand will be helpful in case a nail is clipped too close and bleeds. With the bird restrained, trim the tip off the nail. More can always be removed, so start with small amounts with each clip. Some owners will trim only 1-2 nails a day and take a week to trim them all. This works well, as you are done before the bird realizes you trimmed his nails.

The second technique uses a rotary grinding device like a dermal tool to grind the tip off the nail. It cauterizes as it shortens. A second person is needed to provide the restraint.

Having the nails trimmed by a veterinarian or bird groomer will give you an idea how short the nails should be kept. After the initial trim, you can continue to keep them that short with an every-other-week or every-month trim.

Clipping wings

Clipping wings is necessary for all of the more social birds that are allowed out of the cage. Birds such as canaries and other finches that stay in the cage do not need their wings clipped. Birds have been known to fly into windows, into pots of boiling water or other food, into ceiling fans, etc. We need to take the responsibility to protect them and this responsibility includes clipping wings.

Watch your veterinarian or bird groomer trim the wings the first time. A proper trim allows the bird to exercise its muscles and to coast to a landing if needed. It should prevent the bird from attaining additional altitude. Clipping wings is not without risk. If done incorrectly the bird will not have control of his flight and could injure himself. In addition, if a blood feather is accidentally cut, first aid procedures would need to be used to properly remove it and stop the bleeding.

If the bird does manage to escape to the outside world and fly off, immediately put his cage out in the yard with the door open and a big bowl of his favorite food in and on it. Hopefully, within a day or two, your feathered friend will decide the cage is not so bad after all. Let people know you lost your bird. Put up fliers, call veterinary clinics and animal shelters, and put an ad in the paper. Do not give up hope. Some birds are found and caught weeks after the escape. Keep up-to-date photos of the bird. Take pictures from sides, front, and back. Write down the ID information whether it is from a leg band or a microchip. Having this information will help prove ownership if the need arises.

Showers, baths, misting

Most birds like to get wet and bathing often encourages normal preening behavior. Because our homes are kept at a constant temperature through central heat and air conditioning, the air in the house is dry compared to the bird's natural environment. Some birds prefer to be misted while others like bathing. A squirt bottle can be set on mist (not spray) and aimed up and over the bird so the water falls onto the bird like mist or rain. For birds that like bathing, a dish with an inch of water in it can be placed in the bottom of the cage. Remove it after the birds have bathed. For birds that prefer showers,

place a perch in the shower and supervise them. Keep constant track of the temperature of the water, so the bird does not become too cold or possibly burned if the water temperature suddenly changes.

Some birds like daily wet-downs while others do fine on a weekly basis. Take your bird's lead in the matter. If the bird is not feeling well, skip the bath or misting until he is feeling better to avoid chilling or stressing him.

Some birds enjoy being "blow-dried," while others become fearful of the noise. If your bird likes being dried with a hair dryer, always use the low heat setting, do not let the dryer get too close to the bird, and constantly move the dryer so the heat is not focused on one area of the body for more than a second. Birds have suffered severe burns through the inappropriate use of hair dryers. Use extreme caution.

RECOGNIZING ILLNESS IN PET PARROTS

Signs of Disease and Illness in Pet Birds: How You know if Your Bird is Sick

The presence of signs of illness in a bird is sometimes termed "sick-bird syndrome." This is because many illnesses in birds cause the same signs, and, by the time a bird shows signs of illness, the bird is really sick. Avian birds, like other prey animals, hide signs of illness. Predators look for signs of illness or weakness when choosing their prey, so a prey animal needs to appear healthy or it will be a sure target. By the time they are showing signs of disease, in many instances, the birds have become too weak to be able to disguise it. At this point, small birds, especially, have little reserve, and even handling them can put them into shock. This is why it is extremely important for bird owners to be aware of signs of illness in a bird, and monitor their birds at least twice daily for the presence of these signs.

If you notice any of the signs of illness in the list below, contact your veterinarian. Weakness, labored breathing, bleeding, injuries, collapse, seizures, or other nervous system signs are especially serious, should be considered emergencies, and need immediate attention.

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Signs of illness in birds as characterized by changes in general appearance or stance:

- Huddled
- sitting low on the perch
- sitting on the bottom of the cage
- hanging onto the side of the cage with his beak instead of sitting on a perch
- Head tucked under wing and standing on two feet
- Ruffled feathers (consistently)
- Weakness
- losing balance, teetering, or falling off of perch
- Lumps or swelling of any portion of the body
- picking at his feathers or body
- Trembling
- not preening
- Harassed by other birds
- Eyes dull, sunken, or abnormal color
- walking in circles
- Unusual smell to bird or droppings
- Drooped or elevated wing(s)

Changes in behavior and general attitude that may be signs of disease in birds:

- Inactivity
- Decreased or changes in vocalizations or singing
- Drooping wings
- Collapse
- Seizures
- Increased sleeping or eyes closed
- Poor response to stimuli
- Changes in personality, e.g., more submissive, more aggressive
- Displaying juvenile behavior, e.g., begging for food

Changes in color, volume, consistency, and number of droppings indicating illness in birds:

- Change in color of the urates (the normally white portion of the droppings), urine (the normally clear portion), or feces (normal varies with species)

- Change in consistency: watery (increased urine), loose feces (diarrhea), and hard feces (constipation) indicating illness
- Bloody droppings
- Undigested food in feces
- Decrease in number or size of droppings
- Increase in urates

Signs of disease in birds characterized by changes in appearance of the head:

- Discharge around the eyes and/or nares
- Squinting or half-closed eyes
- Overgrown or flaky beak
- Shiny black beak in a cockatoo (symptom of Psittacine Beak and Feather Disease)
- Loss of symmetry (one area seems swollen or smaller compared to the other side)
- Redness or loss of feathers around the eye
- Discoloration of the beak
- Flicking or twitching of the head

Changes in feathers suggestive of illness:

- Ruffled or fluffed feathers
- Lost, misshaped, or broken feathers
- Decreased preening
- Wet, stained, or matted feathers on the head, vent, or other area
- Dull feathers
- Long or excessive molt, bald spots
- Pulling or picking at feathers
- abnormal color or barring

Changes in legs or feet associated with disease:

- Lameness or favoring a leg
- Flakiness, crusting, or discoloration of feet
- abnormal nail growth
- Shifting feet
- Swollen feet or joints

Signs of illness in birds associated with changes in breathing:

- Difficulty breathing
- Breathing with an open beak
- Tail bobbing when taking a breath
- Sneezing
- Discharge or crusts around the nares

- Wheezing or clicking sounds
- Exercise intolerance (heavy breathing after exercise, or inability to exercise)

- Change in sound of voice

Changes in eating/drinking/digestion indicating disease:

- Increased or decreased appetite
- Increased or decreased drinking
- Vomiting or regurgitation
- Straining to defecate or pass an egg
- Diarrhea
- Swelling in the crop area
- Weight loss (use a scale) and/or prominent keel (breast bone)
- Discharge from mouth
- Inability to pick up food or manipulate it
- Protrusion from the vent

Injuries:

- Burns
- Bite wounds
- Injury from flying into a window or other object
- Bleeding

Vomiting and Regurgitation in Birds: Common Causes

Vomiting in birds can be a sign of a severe disease, and veterinary attention should be given as soon as possible.

Regurgitation and vomiting are signs commonly seen in birds. Regurgitation is the forceful expulsion of the contents of the mouth, esophagus, or crop. A bird that is regurgitating will often bob its head and stretch out its neck, and the food does not look digested, e.g., whole seeds are regurgitated. Regurgitation is usually a normal behavior. Vomiting is the expulsion of the contents of the proventriculus, ventriculus, or intestine. Vomiting is more of a spitting action, and the bird shakes its head from side to side. Vomiting is a sign of illness and should be evaluated promptly. Unfortunately, though it is often difficult to differentiate between regurgitation and vomiting.

What are the causes of vomiting and regurgitation in pet birds?

There are a large number of causes of vomiting and regurgitation ranging from infections, to something the bird ate, to diseases of

multiple organs in the body. Some of the common causes are listed in the following table:

Cause Comments

INFECTIONS

- Bacterial: Mycobacterium, megabacteria, Pasteurella, Salmonella, and many other gram-negative and gram-positive bacteria
- Fungal: Candida, Aspergillus, and Mucor
- Viral: Pacheco's Disease, polyomavirus, pox virus, papillomatosis, Psittacine Beak and Feather Disease, adenovirus, herpes virus, paramyxovirus
- Parasitic: Capillaria, Plasmodium, tapeworms, Trichomonas, Giardia, roundworms, coccidia
- Other: Proventricular Dilation Syndrome, Macaw Wasting Disease, Neurotropic Gastric Dilatation Infections with gram-negative bacteria are one of the most common causes and often secondary to stress, another illness, or fecal contamination of food or water, and are one of the major causes in smaller birds; abscesses may form in some cases; Candida is also often secondary to another illness or stress; Trichomonas is a common cause, especially in budgies; pox virus and tapeworms are more common in imported birds

DISEASES OF OTHER ORGANS

- Heart disease
- Liver disease
- Pancreatitis
- Kidney disease
- Diabetes mellitus
- Peritonitis
- Septicemia
- Electrolyte imbalances
- Trauma Heart disease ; liver disease, especially hepatic lipidosis (fatty liver) and hepatitis, is a common cause in many bird species - hepatic lipidosis especially in budgies; trauma includes flying into a window or the bite of another animal which may cause internal bleeding or infection

NUTRITION

- High protein diet
- Hypervitaminosis D

- Hypovitaminosis A
- Hypovitaminosis E or selenium deficiency
- High iron levels
- Food allergy
- Formula at wrong temperature or consistency
- Overfeeding
- Change in diet Young birds are especially sensitive to the temperature and consistency of the food, and the amount given at one time; abnormal vitamin levels occur over a long period of time; high protein diet is a more common cause in cockatiels

TOXICITIES

- Heavy metals: arsenic, copper, lead, zinc
- Poisonous Plants for Birds
- Foods: chocolate, nicotine, salt, moldy or spoiled foods, avocado, alcohol, cigarettes
- Pesticides/insecticides: carbamates, lindane, organophosphate, rotenone, arsenic
- Household products: cholecalciferol, rubbing alcohol, chlorine, teflon, detergents, pine oil, aluminum chloride (deodorants), potassium chloride (matches), nitrate, phosphorous, thallium Zinc and lead toxicity are common causes; heated teflon such as on frying pans and ironing board covers is very toxic.

GASTROINTESTINAL DISEASE, BLOCKAGE, OR COMPRESSION

- Goiter
- Ascites
- Aerophagia (swallowing air)
- Crop conditions: impaction, stasis, crop burn
- Egg binding
- Gastrointestinal conditions: foreign body, intussusception, volvulus, stenosis, hernia, ileus; grit impaction; ulcers

- Esophageal stricture
 - Neoplastic: papilloma, leiomyoma, adenoma, fibroma
- Conditions which take up space in the chest or abdomen can put pressure on the digestive system; goiter is a common cause in budgies; crop conditions are more common in young and hand fed baby birds; papillomas in the mouth are also common; egg binding is a more common cause in canaries

DRUG REACTIONS

- Antibiotics: doxycycline, polymixin B, trimethoprim/sulfadiazine, sulfadimethoxine, enrofloxacin
- Antiparasitics: fenbendazole, praziquantel, levamisole
- Anti-fungal medications: fluconazole, itraconazole, or ketoconazole only give these medications to a bird under direct supervision of a veterinarian, and closely follow the directions; contact your veterinarian if your bird is taking any medication and shows new signs of illness

BEHAVIOR

- Motion sickness
- Courtship
- Excitement or stress
- Normal weaning behavior Courting behavior to other birds, mirrors, toys, or even owners is a common cause

It can be very difficult to differentiate between regurgitation and vomiting, and even harder to determine an exact cause. The veterinarian will need a complete history, including:

- When the condition started
- How often it occurs
- Other signs of illness noticed by the owners
- Whether the condition is related to a certain event, e.g.; after eating, while playing with toys, etc.
- What the bird is fed
- How the bird is housed
- The sanitary conditions
- Access to potential causes such as foods, household items, toxins, and exposure to other birds
- Presence of the condition in other birds
- Medications or supplements being given to the bird
- Display of any courtship or nesting behavior
- Other diseases the bird may have or has been treated for either currently or in the past

The diagnosis requires careful observation of the bird and a complete physical examination. If at all possible, bring the bird's cage along with you to the veterinarian's office, because it can often offer significant clues. Laboratory tests including a complete blood count, chemistry panel, and a faecal exam to look for parasites are often needed. Radiographs may help determine a diagnosis (see *The Parrot Who Liked Heavy Metal* or "How to Get the Lead Out."). An endoscope may be used to view the upper digestive tract and collect

samples. The bird's mouth or anal area may be swabbed and a culture and sensitivity performed to determine if a bacterial or fungal infection could be the cause. Specimens from the crop will also be viewed microscopically and cultured. Blood may be tested for the presence of viruses or antibodies to them.

How is vomiting or regurgitation treated?

The treatment of vomiting will vary considerably depending upon the cause. Supportive care in the form of stable temperatures, fluid therapy for dehydration, nutritional management (sometimes withholding food may be necessary) are very important. Depending upon the severity of the illness, the bird may need to be hospitalized.

Other therapies may include:

- Giving medications to treat infections
- Changing the diet
- Providing appropriate therapies for diseases of other organs
- Removing the toxic agent from the environment and/or the bird
- Performing surgery or endoscopy to remove foreign objects or tumours and to correct other intestinal blockages

If a bird is regurgitating often and the cause is determined to be behavioral, it may be helpful to remove the toys or mirror that are the focus of his regurgitation.

First Aid, Emergencies, & Poisons

Knowing what to do in an emergency may mean the difference between life and death for your bird. Learn how to prevent emergencies, treat minor injuries with first aid, and when to seek immediate veterinary assistance.

Bird Proofing Your Home, How To

Burns: First Aid for Pets

Disaster Preparedness

Emergencies: When to Call Your Veterinarian

Evacuation Kits: How to Make One

Firefly Toxicity

First Aid and Common Injuries

Heatstroke and Hyperthermia

Holidays Safety Tips for Your Bird

Mercury Poisoning

Poisonous Plants

One of the most important responsibilities of pet ownership is to recognize when your animal is sick. Most people can tell when dogs and cats are ill, but sickness in birds is not easily recognized. One of the greatest frustrations that face avian veterinarians is that by the time a pet bird owner brings a sick bird into the veterinarian the disease condition is usually well-advanced, making treatment difficult, if it can be treated at all.

The failure to recognize illness in birds is not due to the negligence of the bird owners but rather the unfamiliarity with the subtle signs of early disease, which when addressed promptly result in effective treatment of the condition. Anyone can tell that a bird on the bottom of the cage, with ruffled feathers and partially closed eyes is indeed very ill. The purpose of this discussion is to describe the early signs of disease in pet birds so that you can better recognize them.

Birds hide their illnesses very well as it is part of their natural defenses. A bird that is obviously sick in the wild will be subject to predator attack or harassed by other birds. Therefore, a bird that has been sick and ruffled all day may perk up when someone walks into the room thus appearing normal in an effort to mask their illness. When birds are no longer to effectively conceal their illnesses, they are usually seriously ill.

Many people believe that birds are frail creatures and the slightest draft could prove fatal. Birds are actually very hardy animals and tolerate conditions as well as any other animal. Unfortunately, the bird that "suddenly got sick and died" had probably been sick for some time; the disease changes unrecognized, so that even the healthiest bird would eventually succumb.

Outlined below are some basic signs to evaluate in the assessment of a bird's condition. The secret of success is to develop a feel for what

is "normal" for your bird. After you are familiar with normal activity, attitude, appetite, etc., changes from the norm may serve to indicate early signs of disease.

General Appearance

Feathers - A healthy bird should be bright-eyed, alert and have clean, nicely preened, sleek feathers held closely to the body. Sick birds will usually ruffle (puff up) their feathers for extended periods of time. When a bird ruffles it is chilled and its ruffled feathers trap a layer of warm air around the bird. The bird will also close its eyes in a sleepy fashion. Birds that huddle on the bottom of the cage and are extremely ruffled are critically ill.

Dirty tattered feathers may indicate lack of preening due to illness, mechanical damage due to poor housing, or "emotional upset." Staining of the feathers above the nares (nostrils) indicates rhinitis (nasal discharge). Pasting of head feathers is usually seen with vomiting. The feathers around the vent should be clean. If droppings are stuck to the vent it could indicate an intestinal tract infection or abdominal enlargement.

Posture - The bird should maintain an erect position on the perch, weight evenly distributed on the feet, wing tips crossing over the back and the tail feathers maintaining a straight line with the back. Sick birds will sit with either one or both wings drooped and its tail directed downward. A bird that has their tail directed downward may have a respiratory tract disturbance or abdominal discomfort (infection or enlargement). Tail bobbing/flicking also can occur.

Unsteadiness on the perch, wobbliness or low posture on the perch are signs of abnormality. Birds with severe respiratory or abdominal disease may maintain a horizontal position on the perch. Restlessness, shifting of body weight or favoring of one leg may indicate pain or dysfunction due to disease or injury. In budgerigars paralysis or weakness in one leg may be due to kidney tumors.

Attitude - Changes in a bird's attitude may indicate a problem. A decreased activity level, the bird that is no longer playful, talking less or not singing may be indications of early disease. Personality changes may also provide early clues, such as the aggressive bird,

that you could never handle easily, suddenly becoming passive or the normally friendly bird that becomes aggressive/irritable and wants to remain alone.

Feet/Legs

Infections of the feet occur despite precautions. Pressure sores on the bottom of the feet may develop from improper perch sizes and could lead to ulcerations/bumblefoot. Keep the perches clean, vary the sizes, and provide a soft or non-rigid type perch. If you notice weight shifting, redness, swellings, sores on the feet/legs or lameness, veterinary care should be sought quickly.

Split leg bands can cause the loss of toes, feet, legs and sometimes bird lives. Microchips are a safer form of identification of lost birds. Split leg bands, that have a gap in them and that can be put on at any age, should be removed by a veterinarian. **HOWEVER, PROPERLY SIZED, CLOSED BANDS, THAT CAN ONLY BE PUT ON WHEN THE BIRD IS A CHICK ARE SAFE AND SHOULD NOT BE REMOVED.**

Unusual crustiness/flakiness on the legs may indicate a nutritional or parasitic condition and should be properly evaluated. One strong caution-care must be taken whenever cream or ointment are applied to a bird. Never apply it to the feathers as it will spread and destroy the insulative properties of the feathers. If it is to be used on the feet or legs, use it sparingly.

Respiratory Tract

When a bird breathes there should be very little effort. Breathing hard while at rest or heavy breathing for prolonged periods after exercise/exertion can indicate a problem. Any noises heard while breathing such as clicking, wheezing or frequent sneezing are signs of sickness; a bird should breathe with no noticeable respiratory sounds.

Upper respiratory tract infections are very frequently seen in birds. A nasal discharge may appear as fluid in the nostrils or staining of the feathers above the nostrils. Conjunctivitis (pink eye) may also be seen with swollen, reddened eyelids and discharge around the eyes. Frequent blinking or partial closing of the eyes for prolonged periods

may indicate early signs of conjunctivitis. If the condition worsens into a sinusitis there can be swelling around the eyes. Early recognition of respiratory disease in birds is important because pus in birds is not liquid, rather it becomes "cheesy." Thus when the pus builds up in the sinuses and air sacs removal is very difficult.

A bird that is dyspneic (difficult breathing) with mouth open and gasping is extremely ill and must be handled with extreme caution, if at all. Not all dyspneic birds have a respiratory tract infection. One possibility is a space occupying mass in the abdomen that may prevent full expansion of the air sacs so that air flow through the lungs is greatly reduced. Tail bobbing is another sign of an impaired respiratory tract, whether it is a primary respiratory disease or abdominal enlargement. Heart disease in birds can also cause labored breathing.

Extreme breathing difficulty can lead to the development of cyanosis, indicated by a bluish color of the skin, legs and beak. However, do not be fooled by the normal bluish color of the legs of some birds, particularly budgies.

The incessant, high-pitched squeaking sometimes heard in budgies may be due to goiter and pressure of the enlarged thyroid gland on the syrinx (voice box)/trachea (windpipe). The condition responds nicely to iodine therapy.

Digestive Tract

Food Consumption - A bird that is not eating well is at great risk due to its very rapid metabolic rate and its condition can deteriorate rapidly. It is important to check daily that your bird is eating, and if so, how much. A bird may be picking at the food cup and not actually eating. You must determine if the seeds are being hulled or if they are just being scooped out of the dish onto the floor of the cage. Sometimes a bird may hull the seed but not ingest it. Check the seed cup and bottom of the cage for seed hulls as well as making sure there is not an increased amount of hulled seed present.

If there is hulled seed on the bottom of the cage it must be determined if the bird is not ingesting the seed, regurgitating or vomiting. Regurgitation is a normal part of the courtship behavior. During courtship, regurgitated seeds may be seen on or near the

mirror or toys. The bird may even begin to regurgitate to you in a courtship gesture. However, vomited seeds can be seen in sticky clusters throughout the cage - often adhering to the bars of the cage. Further evidence of vomiting is that the head feathers of a vomiting bird are pasted together with vomitus, and this can occasionally mixed with seed.

Grit is a controversial subject. It should only be used sparingly as it is not continually required for the replenishment of the gizzard. However, for the purposes of our discussion, sick birds, especially those with gastrointestinal upsets, tend to overeat grit. This could lead to impaction/blockage. Very often it is believed that a sick bird is eating, when in fact it is consuming only grit. Thus excessive consumption of grit could be indicative of a problem.

The best means of determining whether or not a bird is eating enough and that food is passing through normally is to check the droppings daily. In an upcoming section we will discuss this in detail.

Water Consumption- Birds may not appear to drink a large amount of water but they do require an adequate fresh, clean source, changed daily. Birds that begin to drink excessive amounts of water may be suffering from a metabolic disorder (such as diabetes), kidney disease or a digestive tract disturbance. You should have a feel for daily water intake. You do not need to determine the exact amount consumed as some will be lost due to evaporation, for example. Rather you would notice that the water cup is half as full as it normally has been and also that the droppings have become more watery.

Evaluation of the Droppings –

Droppings are an excellent indicator of a birds condition. Changes in the appearance of the droppings or their number may be early signs of an abnormality. First and foremost develop a feel for what is normal for your birds. Check the cage papers daily. The number of droppings per day should be fairly consistent, a reduction in number indicates reduced food intake (or passage of food material) and should alert you to a potential disease condition. For example, a healthy budgie should have more than 30-40 droppings per day. Also

the appearance of the droppings should be roughly similar. Droppings will change depending upon the variety of food consumed, but if the bird has not had any unusual dietary changes and the droppings appear significantly different, a problem may be developing.

We recommend the cage bottoms be lined with paper so that the droppings can be observed easily on a daily basis and the cage papers discarded daily. If wood shavings or corn cobs are used, although convenient, the character and number of droppings cannot be easily determined. Also if these are used in cages they are not changed as often which could increase the possibility of elevated bacterial populations in the cage bottom. Therefore if you do use wood shavings or cob you must make special efforts to check the droppings daily as well as perform frequent cleanings.

A normal dropping consists of three basic parts; a formed fecal portion, an off white urate portion, and a liquid urine portion. The fecal portion is usually green in seed eating birds as seed imparts no color to the droppings so the green bile color predominates. However if the bird would eat foods other than seed the color of the fecal portion would change. For example, a bird eating pellets would have brownish droppings, a bird fed strawberries would have reddish droppings. The consistency of the droppings will vary with the variety of bird and its diet. A bird that eats fruit, vegetables and other succulent foods will have more watery droppings. Pelleted diets, in addition to causing brownish droppings, may also lead to increased water intake and hence more watery droppings with a less formed fecal portion and increased urine.

Droppings that have suddenly changed consistency and color could indicate disease. The amount of fecal portion should be checked. If the bird is not eating, there may be a scant fecal element or a dropping that is mainly urine with a small amount of bile. It is normal for a bird to "urinate" when it will pass only liquid urine and urate crystals with no fecal matter. However, this is an occasional occurrence and if it predominates a problem exists. Remember that although a reduction in the number of droppings or amount of fecal portion indicates reduced food intake, it may also indicate

interference with normal passage of fecal matter, such as with vomiting.

Watery droppings should be carefully evaluated to determine if they are due to gastrointestinal disturbance or increased urine production (polyuria). A somewhat formed fecal portion with an extremely watery urine portion or excessive urate portion may indicate a kidney problem or metabolic problem such as diabetes.

A more liquid consistency in the fecal portion of the droppings is suggestive of an intestinal tract infection. Occasionally, birds with an intestinal disturbance may have a grayish coating on the fecal portion due to excessive mucous. When a bird has pancreatic disease it has characteristic "popcorn" droppings which are bulky and off white to gray in color. Undigested seed or grit in the droppings are abnormal and could indicate a gizzard malfunction.

Blood in the fecal portion of the droppings is usually from the cloaca or oviduct. Severe inflammation in the cloaca, ulcerations or tumors may be responsible. Blood may also be seen in female birds encountering difficulty passing eggs. In Amazon parrots and macaws, blood in the droppings could be due to cloacal papillomas, which are of viral origin. Other signs of this condition include straining to defecate and the presence of granulation tissue (appears almost like a strawberry) around the vent and in the cloaca.

The urate portion (urine crystals) should be off white in color. If the urates are yellow or neon green it may serve to indicate hepatitis. The neon green urates may be suggestive of psittacosis. Blood in the urine or urates (to be distinguished from blood in the fecal portion) are indicative of a kidney disturbance or toxicity, particularly heavy metal poisoning such as lead.

Unusual Growths/Enlargements

Birds can develop abscesses, feather cysts and tumors, so any unusual swellings should be properly evaluated. Fat deposits may develop on the chest and/or abdomen and should be considered abnormal. Other abdominal enlargements could indicate the presence of a tumor or an egg. Many times these growths are not detected until they are quite large. Early detection may be accomplished by

noting irregular displacement of the feathers. Keep a close watch on your bird as the earlier these problems are treated the greater the success rate.

POTENTIAL RISKS

WAYS TO REDUCE THE RISKS

Bites and Scratches

Handle only when necessary

Capture, restrain and handle correctly

Wear Personal Protective Equipment (PPE)

Practice personal hygiene methods by washing hands before and after eating, food prep, smoking, going to the toilet, touching animals and animal wastes

Disposing of bird wastes correctly

Knife and Secature Injuries

Put equipment back where it belongs when not in use

Conclusion

Develop a sense for what is normal with your bird, deviations from the norm could indicate disease. The more you handle and interact with your bird the greater will be your understanding of the bird as well as your ability to detect potential problems. If you observe any of these signs or have questions about the condition of your bird, do not hesitate to notify your veterinarian for aid. A sick bird that is treated promptly and properly has a much better chance of recovery. Yearly physical examinations including blood testing and fecal analysis are strongly recommended for all birds. New birds should be examined shortly after purchase so that their state of health can be properly evaluated. Early detection is the key.

Here are some of the things you should be aware of to keep your pet bird as safe as possible in the home.

Above all use common sense. You already are likely aware of most of the items on our pet bird safety list below, but we are all human, and sometimes just forget or have other things on our mind.

Non Stick or Teflon Coating This coating is found on non stick cookware but also waffle irons, bread machines, irons, ironing board covers, curling irons, space heaters, blow dryers and more.

Kerosene or Gas type heaters which give off fumes

Open Toilets, or any other deep water source. Once birds get wet, it's ll over for them, they have no ability to swim.

Pets, cats are notorious for stalking birds, even dogs cannot be trusted.

Electrical wires, extension cords...any wire a pet bird can and inevitably will chew on.

Poisoning...insecticides sprayed in the home, ammonia, bleach, oven cleaner, glues, nail polish remover, paint, perfumes, heavy metals, and many other home cleaning products.

Poisonous plants and some foods are also a danger.

Toys...a bird can stangle themselves with ropes made to hang toys. Rubber toys are a no no, birds have also been known to chew plastic toys and swallow the pieces.

Ceiling fans

Windows and mirrors...birds can fly in to these and seriously injure themselves.

Impure Air....wood and coal stoves are a big source of indoor pollution, smoke will kill your bird quickly. Aerosol products of any kind should not be used around your bird.

Cigarette smoke has been implicated in respiratory disease in pet birds.

Carbon monoxide is also dangerous to birds, so use a carbon monoxide detector in the home, and be careful not to run your vehicle in an attached garage.

Air Pollution....smog, dust in the air, exhaust fumes from vehicles, all can be very harmful to your pet bird.

Birds have a very delicate respiratory system, it must be protected at all times.

Tap water....birds are much smaller than humans and will react to the chemicals in tap water, flouride and chlorine much quicker. Both of these chemicals are toxic and can harm your bird. Even well and spring water often has high concentrations of certain minerals and bacteria.

We recommend using Only steam distilled water.

Paint...in older houses the paint on the walls may contain lead.

Bird Cages....some older bird cages have components made our of lead

Scented Items...candles, potpourri, soaps, strong perfumes, etc.

Loud Noises....birds can become scared and stressed when hearing loud, unfamiliar noises....stress leads to disease, being scared can cause them to flutter and fly in to things harming themselves.

Hot Water...check the temperature of the water before giving it to your pet bird for a bath or drinking, also don't let your birds fly around the kitchen when you are cooking, steam rising from a boiling pot of water can cause the bird to be unable to fly and possibly drop on to the hot stove or in the pot of boiling water.

Quick List of common items which will harm your pet bird:

Asbestos
Bleach / Chlorine
Carbon Monoxide
Cigarette Smoke
Diazanon
Flea Bombs and Collars
Floor Polishes
Formaldehyde
Hair Dye and Spray
House Paint
Kerosene
Matches
Moth Balls
Nail Polish & Remover
Oil Paint
Oven Cleaner
Overheated Nonstick
Cookware/Teflons
Paint Remover
Perfume
Permanent Wave Solution
Pesticides
Shoe Polish and Cleaners
Spot Removers
Spray Starch
Suntan Lotions
Surgical Acrylics
Toilet Cleaners
Wax

Common health problems for Macaws/Avian diseases

Curatives of Macaws-disease curation

Disease and parasite prophylaxis

Growth statistics of a Macaw-lifespan and age

Routine tests for Macaws good health

Routine cleaning schedules for the Macaws -cages, feeding equipment

Pet Macaw Activities

Macaw Activities – Practice and Play

Practice and play are imperative exercises for the physical prosperity and mental soundness of your parrot. These exercises discourage trouble and keep the issues of shrieking and quill picking.

Despite the fact that they are entirely tender and cuddly, macaws are likewise extremely tumultuous and need an expansive range to work out. Outside is perfect as most indoor spaces are too little. Incredible climbers, they will investigate everywhere on their walled in area, here and there hanging by their toes from the top.

Macaws are incredible chewers and will bite on anything inside span. They can be entirely dangerous to family unit things and woodwork, so on the off chance that you keep them on a playpen ensure nothing profitable is inside scope. Give bunches of new non-harmful tree limbs for them to bite up. Likewise make a point to give your macaw heaps of toys and exercises as vast connection chains, fowl steps, parrot swings, ropes, wood toys for biting and biting, and pivot new flying creature toys all the time.

8 Parrot Activity tricks you could try out!

1. Shreddables (anything made out of wood or something that can truly be destroyed into pieces)
2. Sustenance finding (toys that contain nourishment within them)
3. Confuses (rationally difficult toys your fledgling needs to make sense of how to open or illuminate)
4. Foot toys (little toys that feathered creatures like to snatch and cling to with their feet)
5. Play exercise centers and sustenance discovering trees (these are utilized outside of the enclosure and contain numerous toys close by them)
6. Nourishment toys (actually sustenance made into the toy itself, so the winged creature is eating the "toy" yet the entire thing is truly nourishment)
7. Occupied toys (swings, boings, stepping stools, nets, anything that your fledgling really gets on to use to get around however can likewise play on as well. These toys can be utilized rather than some roosts to make your winged animal more dynamic in his pen!

● **The behaviours of Macaws-with other pets and or strangers**

Macaws Behavior, Behavioral Guidance / Training

Macaw Information Page

Macaw ownership generally presents multiple challenges, such as:

Lunging:

Macaws often lunge at people, especially strangers. The immediate reaction by those "under attack" teaches the macaw that it can control humans with threat behaviors.

Experts believe that lunging rarely is about aggression, but macaws use it as a test and as later on as a game.

Regurgitation:

Sexually mature macaws regurgitate enthusiastically for their mate (human or feathered). It is best to discourage, not punish, this habit. Note: Regurgitating can also signal a medical condition, like a yeast infection in the crop.

Excessive chewing - especially at certain stages in their life.

They regard anything in your home as a "toy" that can be explored and chewed on; destroying items that you may hold dear or are

simply valuable. Undisciplined macaws will chew on electric wiring potentially causing house fires.

Biting:

They do discover their beaks as method of "disciplining us" once they are out of the "baby stage" and they can generally be somewhat naughty, and it really is important to learn to understand them and to guide their behavior before an undesirable behavior has been established.

Noise:

Macaws are naturally noisy - their natural voicing does not constitute a behavioral problem. People who are sensitive to noise shouldn't even consider a parrot as a pet. Trying to suppress parrot vocalizations usually increases it. People often give increased attention to screaming parrots trying to get them to be quiet. It takes no time at all for a parrot to realize that screaming will get your attention. Even though the natural call of a macaw can't (or should not) be entirely eliminated, there are ways to discourage screaming / screeching in your pet macaw. More on "screaming."

Specie

Macaws are extremely food motivated, making food rewards a good training tool. Provide your pet with a treat for doing what you want him or her to do - this will potentially prevent many problems. For example, training a macaw to climb on a stick can prevent problems later when your pet might become territorial around the cage. You can safely remove a stick-trained macaw from his cage and place it on a playtop prior to servicing the cage, thereby avoiding any aggression.

Even a young bird that has not been neglected and abused requires proper guidance; this becomes even more challenging when it involves a rescued bird that may require rehabilitation.

Overall, it is important to guide parrot behavior, but even more so if your feathered family member is a magnificent and powerful macaw. Huge, beautiful and brightly colored, many consider large macaws the ultimate pet birds. But choosing a macaw as a pet bird can be a serious mistake if people don't know what they are getting into by bringing home such a complex parrot.

Macaw Noise

“Loudness is the first word that should come to mind when thinking of the large macaws, because racket is built in to their DNA. Indeed, according to those who have seen them in the wild, you can hear macaws from at least 5 miles away. As a consequence, macaws rarely succeed over the long-term when housed in apartments or other close quarters.

I consider it normal for most adult macaws to produce 5 to 10 minutes of gut-wrenching, window-shattering, psychosis-inducing noise several times a day. Just because people don't enjoy this, doesn't mean that the noise is abnormal. As they say, if you want a quiet pet, get a reptile or a fish!

Macaw Destruction

Demolition or destruction is a characteristic behavior of parrots. I've been told numerous times that the best way to identify the favorite roosts of wild parrot flocks is by looking at the ground. The medley of detritus found beneath a parrot's perch often includes bits of food, wood and anything else its beak came upon.

Chewing your woodwork and expensive books is just as natural a behavior as shredding trees in the jungle. This behavior cannot, nor should it, be “trained out.” There are few substances in our homes that can withstand the beak of a determined large macaw, so decorate with prudence.

Macaw Sociability

Like many species of parrots, macaws are extremely social creatures. Rarely seen alone in the wild, they spend much of their time in small family flocks. Not all psittacine species “mate for life,” but this appears a fundamental characteristic of the large macaws. Because of their gregarious nature and inclination to form tight bonds, you can't expect a macaw to sit quietly in its cage while you go about your day. They need daily human interaction.

Macaw Territoriality

According to macaw researcher Charles Munn, Ph.D., the primary obstacle to macaws reproducing in the wild is a lack of the huge dead trees they need for their nests. Despite residing in our living rooms, our pet macaws retain that territoriality toward their “trees.” In our homes, this can translate into aggression, especially around their cages.

Combine that tendency with most people's fear of that macaw's big beak, and many pet macaws become problematic for their owners, making benign chores, such as feeding and servicing the cage, a dangerous venture for inexperienced caretakers. This behavior, however, does not need to become a problem, as I will explain.

Macaw Physical Affection

Although many people consider cockatoos the most physically demonstrative parrots, those of us who really know macaws think they are equally so. Unlike cockatoos, which often cuddle up to total strangers, macaws are only physically affectionate with people they know very well. It's unlikely that an adult macaw you've just met will allow you to cuddle with it, but a macaw that loves and trusts you is almost puppy-like in its affection. For example, my 50-plus-year-old blue-and-gold macaw Sam rolls over on her back to play and blow kisses. Although a wild-caught parrot, Sam often acts just as sweet and gentle as any domestically-raised bird.

More Macaw Behaviors

Lunging: Macaws often lunge at people, especially strangers. This is a very effective way to scare the daylights out of someone who is afraid of that big beak, which, in turn, teaches the macaw that it can control humans with threat behaviors. From my experience, the lunge is rarely about aggression. Instead, many macaws seem use it as a test.

My Sam has raised this game to Olympic levels. I even gave it a new name as it evolved, "Boo." When she is meeting a new person, Sam appears outgoing and friendly. She sits on the person's arm and does her silly greeting dance. She blushes prettily and sweetly says, "Hi," lulling that poor sucker into a false sense of security. As the person begins to relax around her (as in, "Hey, dealing with big parrots is no big deal after all?"), Sam instantly changes. At that point, Sam suddenly lunges at the person's face, throwing her wings out to their full 3-foot span and simultaneously yelling "Boo!"

Inexperienced people who possess normal nervous systems, jump violently. Obviously pleased with her success, Sam's eyes flash and she laughs (as in, "Gotcha, chump!") It took her seconds to identify that a person is afraid, meaning she is in control of the relationship. Many other macaws also play this lunging game, likely for the same reason.

Regurgitation: Sexually mature macaws regurgitate enthusiastically for the humans they love, whether in nesting season or not. As with

any other sexual behaviors, discourage, but do not punish this habit. For reasons we don't understand, this behavior sometimes, in very rare instances, reaches the level of pathology, with individuals regurgitating almost constantly. [Note: Regurgitation can also signal a medical problem like a yeast infection in the crop, which your avian veterinarian can rule out quite easily.

Singing: As far as I can tell (from the hundreds of macaws I have encountered over the years), macaws love to sing, either softly or loudly and with great enthusiasm. This is wonderful, except that the ones I know are completely tone-deaf and sing as badly as my husband does (and that? really bad, trust me). My blue & gold adores singing along with sad ballads in a loud, off-key, "La lalalaaaaaaaaaaaaah!"

Macaw sense of humor: Many parrot species seem to possess a wry sense of humor, but the macaws' funny streak runs the raucous and often quite black route. In my office, Sam enjoys sitting on the back of my chair, where she can reach down and thump me on the top of my head. When she's finished with that, she starts flapping her wings, and flapping and flapping until she creates a whirlwind that blows the piles of paper on my desk off around the room.

Although she'd been flighted for more than 30 years, she loves performing these wing flaps and only in my office, in that particular spot. She snickers as I lurch about, snatching at loose papers. It's especially fun for Sam if I lose my temper. (It seems to me that there are few things that tickle macaws more than getting their humans mad enough to lose their tempers.) More than once, people have gotten very tardy callbacks from me, because Sam blew all my little notes everywhere, and I lost a phone message behind my desk. Somehow, that doesn't seem like a good excuse for a parrot behavior consultant to use, though

From Bad Macaw To Good Macaw

From my experience, macaws thrive in situations where their people do not allow them to run amuck. I boarded parrots in my home for 10-plus years, and all the macaws that stayed with me responded beautifully to gentle and loving limits set on their behavior. They even seem enchanted by those that were not scared of that big beak and developed lavish crushes on them.

Macaw owners need to set clear limits on a macaw's behavior and to consistently uphold those rules and expectations. Do not allow the beak to scare you off. After all, if you have a dog that frightens you, how could you establish a good relationship with that animal I am not saying that you should allow the bird to injure you, but the fear of that possible injury is often worse than the reality.

The good news is that most macaws are (like me!) extremely food motivated, making food rewards a good training tool. Providing a bird with a tangible incentive (food) for doing what the owner wants it to do, an owner can avoid a lot of potential aggression. For example, training a macaw to happily climb on a stick can prevent problems later when the bird might become territorial around the cage. You can safely remove a stick-trained parrot from its cage and place it on a playgym prior to servicing the cage, thereby totally avoiding any conflicts.

As previously mentioned, just because a human doesn't enjoy the intermittent bursts of blood-curdling macaw screams, it does not constitute a behavior problem. Macaws make noise; they cannot be taught to be quiet.

In fact, trying to suppress parrot vocalizations usually increases it. People often give increased attention to screaming parrots, trying to hush them. It takes the birds about 32 seconds (or less) to grasp that screaming gets them noticed. After all, when our parrots are quiet, don't we often forget they are there, only to yell at them when they scream? The behavior we enjoy —quiet time— we ignore, and the behavior we do not enjoy — screaming — we reinforce with lavish attention rewards.

To keep a macaw as quiet as possible, you'll first need to understand that this is a naturally noisy animal. Knowing this, I encourage my Sam to scream with me for short bursts off and on through the day, as I feel this allows her a natural outlet to blow off steam. I refrain from this exercise when my husband is home, because he has no tolerance for the sound. When Sam is acting particularly noisy, I might give her a shower right before my husband comes home. Preening wet feathers is guaranteed to subdue her.

Therefore, I do not expect Sam to be a quiet bird. Instead, I try to channel her normal racket into times when it is least likely to cause friction in the household.

Protecting your woodwork and furniture from a macaw's beak is simple. Do not allow your macaw unsupervised out-of-the-cage

playtime and do not position the cage too close to the wall or anything of value. Simple. Smart macaw owners also provide easy access to chewable objects to keep that beak busy. My macaw happily composts her way through phone books, old paperbacks, chunks of wood and branches with bark intact. When doing my job properly, she is not allowed access to things I don't want destroyed. If I fail at my job and she demolishes something, that is my fault, not hers.

Macaws are rowdy, funny and affectionate clowns that will give you all the love and loyalty you will ever need from a companion — as long as you understand that no matter what, they are still macaws. Macaws do not make good pets for the faint of heart, apartment dwellers or those prone to migraines. To expect them to be other than what they are will only set you both up for failure. Enjoy the macaw for all that it is, and you open yourself up to incredible joy.

POTENTIAL RISKS

WAYS TO REDUCE THE RISKS

Bites and Scratches

General Information/sourcing

Macaws (*Ara* sp.) are the largest members of the parrot family. These magnificent, vividly colored birds originate from Mexico, Central and South America. They have a long tapered tail, strong body and large powerful beak. Macaws are intelligent, playful and inquisitive. This is a high maintenance bird. Considerable space is required to house this immense bird. They require plenty of affection and attention. Some birds will bond with one person, showing aggression towards others, some are nervous and excitable, while some individuals and smaller species tend to be calmer. Macaws are able to speak, but are not well known for this ability. Their vocalizations tend to be loud, harsh, penetrating squawks. Macaws love to play and chew. Their impressive beak can be exceedingly destructive. Providing a continuous supply of non-toxic, freshly washed, large branches and pet-safe toys will afford many hours of entertainment and exercise for your bird. Hardwoods such as oaks and maples will last longer. Despite the exotic appeal of macaws, they may prove unsuitable for most households or family situations. The Blue and Gold Macaw, although mischievous, is likely the most

appropriate macaw for a family. The Severe Macaw is almost half the size and has a gentle nature but may prove noisy.

"Despite the exotic appeal of macaws, they may prove unsuitable for most households or family situations."

Some commonly kept macaws include the Blue and Gold Macaw, Scarlet Macaw, Severe Macaw, Green-winged Macaw and the Hyacinth Macaw.

Purchasing a Macaw

Macaws may be purchased from a pet store or a reputable breeder. When selecting a macaw, try to choose a young bird as it may be easier to tame and train. Older, wild, colony or parent raised birds may prove challenging to tame. Hand raised babies often make better pets since they have been completely socialized with humans. Young birds are easier to tame and adapt readily to new environments and situations. Your new bird should be exposed early to different events (young and old people, males and females, other pets, car trips, visits to the veterinarian, etc.) to help promote a calm, well-adjusted pet. The lively, alert bird that is not easily frightened is more likely a healthy bird. After purchasing your new bird, have it examined by a veterinarian familiar with birds.

Veterinary Care

Macaws require regular, routine veterinary health check-ups. Your veterinarian can perform a physical examination, grooming (beak, nail or feather trim as necessary) and laboratory tests as needed. During these semi-annual check-ups, health, nutritional and maintenance issues can be identified and addressed. Veterinary check-ups help prevent disease and will aid in the maintenance of a long lasting, healthy relationship between you and your bird.

Color

Mature

- There is a rainbow of color combinations depending on the species.
- Blue, green, yellow, red, orange, and rusty brown
- Most have a white, naked area of skin surrounding the eyes, extending to the beak

Immature

- Similar to the adult

Sexing No external sex differences

Weight Average 9 - 50 ounces (250 - 1400 grams)

Size Average 12 - 40 inches (30 - 100 cm) in length

Life span 25 - 35 years (maximum 60 years or more)

Diet Consult your veterinarian.

Breeding Sexual maturity at 4 - 7 years depending on the species

Most are difficult to breed in captivity

Brood Size 4 - 7 white eggs hatch in 23 - 28 days, young leave the nest in 3 months

Cage Minimum 2 ft x 2 ft x 3 ft long (60 cm x 60 cm x 90 cm) for smaller species

Minimum 3 ft x 4 ft x 4 ft long (90 cm x 120 cm x 120 cm) for larger species

As I answer questions for this wonderful website's Parrot Q&A I find myself constantly emphasizing the importance of having one's pet bird checked out yearly by an avian (bird) veterinarian.

Indeed, when I was still doing consultations, I often refused to work with a Parrot with a so-called "behaviour problem" until after the owner had the animal thoroughly checked out, and I do the same with questions.

I often find myself saying, "Get your bird checked by an experienced avian veterinarian and if he/she cannot find anything wrong, then message me again." This is because many supposed "behaviour problems" are actually manifestations of physical or medical problems.

I also routinely hear stories about veterinarians seeing birds when that veterinarian evidently does not have a great deal of information about feathered creatures. A recent example would be the Parrot who was diagnosed as having allergies simply because he had a runny nose – but that diagnosis was evidently made by just looking at the outside of the bird.

From the owner's description, no blood work or other diagnostic testing was done. According to the Association of Avian Veterinarians [see addendum], depending on species, Psittacosis ("Parrot Fever") is the primary reason for runny noses in Parrots, and bacterial infections are next, NOT allergies, and testing needs to be done to make certain nothing else is going on.

When I questioned the bird's owner further, she admitted that she didn't think this veterinarian was a "real" bird vet. [Note: the most common cause (etiology) of these bacterial infections is chronic malnutrition – specifically due to insufficient amounts of Vitamin A.]

Consequently, I am often asked just how a lay person is supposed to find a veterinarian who is knowledgeable about birds, as opposed to a veterinarian who will see birds... and how can a lay person tell the difference.

Disheartening Survey

When people get a new dog or cat, most of them know to seek veterinary care for their new pet. According to a survey done in the USA 20 years ago (the most recent I could find) for PET AGE MAGAZINE, 60% of dog owners and 68% of cat owners have their animals checked regularly by a veterinarian.

However, the same survey found that only 7.6% of bird owners take their animals to avian veterinarians, and that 92% of their respondents take their sick birds to pet store employees to be treated.

Pet Stores and Pet Store Employees

These numbers are incredibly depressing, considering the fact that the average pet store employee has neither the training nor the qualifications to treat sick birds safely and effectively. Suffice it to say, if your foot is broken, you don't go to a shoe store for treatment. A corollary of this rule is that you don't take a sick dog to a cow veterinarian – so you shouldn't take your sick bird to a dog veterinarian.

So What Exactly is an “Avian Veterinarian”?

Contrary to what many people seem to think, veterinarians are NOT trained in veterinary school to deal with every species of animal they might come across in the world of companion animals. They are required to learn about the domesticated animals (dogs, cats, horses, cows, sheep, etc.), but not what are termed exotic animals.

[Note: Exotic animals are loosely defined in the USA in small animal veterinary medicine as anything that isn't a cat or dog. Hence, if you have a pet chicken, it is defined as an exotic animal.]

I do not know the situation in the UK, but in the US, most veterinary schools have a course in avian medicine, but in most cases that course is classed as an "elective" – in other words, veterinary students are not required to take it. They take the course only if they have a specific interest in these other types of animals.

Also, not all veterinary schools even work with exotics. For example, here in the USA, the Veterinary Hospital of the University of Pennsylvania has recently closed their exotic animal department, so they will only treat dogs and cats in their small animal facility in Philadelphia.

As a consequence, no matter how interested they might be, veterinary students at the U of P will get no hands-on experience with exotics unless they have spent part of their training in other facilities.

A Rare Bird

Avian veterinarians are extremely dedicated individuals who, in their copious free time (joke) have sought additional training in the relatively new field of avian medicine.

They are members of the AAV, and/or they are board certified in avian medicine and/or (in the UK) they have taken the Royal College of Veterinary Medicine Zoo Vet Qualification or are certified through the European College of Avian Medicine and Surgery (ECAMS) [see addendum].

By so doing, this means they have access to all the most current medical information about birds. This is critical, since new information is discovered all the time, and we all want our birds to benefit from state of the art avian veterinary medicine.

So How Do You FIND These Veterinarians?

You can find these specialized veterinarians by asking around, but make certain you are asking reputable sources for

information. Do not automatically assume that the veterinarian recommended by a store or breeder is the best veterinarian for your pet.

For example, there was a bird store in my area for many years that used to void the guarantee on a sale if buyers took their new bird to the only board certified avian specialist in the area. The store preferred to refer their buyers to area veterinarians who apparently did not always do the diagnostic testing recommended by state-of-the-art avian medicine (as outlined by the AAV).

From my own experience, this sort of thing happens when a facility is famous with local avian veterinarians for selling sick birds. (This facility also badmouthed me, which tells me I must be doing something right!)

Reputable sources of information would include educated members of local bird clubs, good avian pet stores, or your local dog and cat veterinarian. See the end of this article for contact information.

It should be mentioned that most avian veterinarians also care for the other animals defined by veterinary medicine as exotics – such as reptiles, ferrets, amphibians, etc. This does not mean they are not avian veterinarians. Depending on location, few veterinarians can survive financially by seeing ONLY birds. There are also plenty of competent avian veterinarians who also treat dogs and cats.

When contacting a veterinarian who claims to do birds, it is perfectly valid to ask what percentage of a veterinarian's practice is made up of birds. That will tell you how much experience the veterinarian actually has with birds. If he or she only sees one or two birds per month, for example, you may wish to go elsewhere.

However, if you find a veterinarian who tells you he or she knows little about birds but would like to learn, that's ok. That person generally knows when to ask someone more experienced for help, and most of the top avian veterinarians in the world are accessible by phone. The veterinarians that won't admit they don't know are the ones that really scare me.

And one other very important question to ask: “What was the last continuing education seminar about birds that this veterinarian attended?” Several years ago, the US branch of the AAV had their annual conference in Philadelphia, Pennsylvania (where I live) and I was appalled how few of the veterinarians from the area that “do birds,” showed up to learn the most current information about avian medicine. I concluded that they were quite happy to take someone’s money to see their bird – but they were not going to spend their own time and money to really learn about them.

How to Tell If You REALLY HAVE an Avian Veterinarian?

Now that pet birds have become so popular, there are lots of veterinarians who will "see birds" who have perhaps less knowledge than we might wish. The following are a few tips (in no particular order) that may help you differentiate between these people and their more knowledgeable colleagues. You do not necessarily have a REAL avian veterinarian if:

1. When you call for an appointment for a sick bird, the receptionist tells you it's too cold to bring a bird out. The veterinarian may be experienced with birds, but his or her support staff is not. There are plenty of easy tricks to keeping a bird warm in transit – which is definitely preferable to allowing the bird to die at home without professional help.

2. When you arrive at the hospital for your appointment and nobody knows what kind of bird you have. If you have a rare species, be fair – but if they insist that your cockatiel is a cockatoo, there's a problem.

3. Everyone at the hospital is afraid of your two month-old baby macaw. Many bird veterinarians have difficulty finding experienced avian technicians – but the veterinarian must know how to handle the animals if his/her support staff does not. If everyone on staff is afraid of a baby, no matter how big, then they have little or no experience with Parrots.

4. The veterinarian does not remove the bird from its cage to do a full physical exam. The days of diagnosing from the outside of the cage are long gone. To do competent avian medicine, a

veterinarian has to do a proper physical exam, and to do that, a veterinarian has to actually TOUCH the animal.

5. The veterinarian does not weigh your bird. Properly equipped avian veterinarians will have an accurate gram scale with which to get weights on their patients every time the bird comes in. A current, accurate weight is not only necessary to properly calibrate a medication dose, but also to help the veterinarian evaluate the overall condition of the animal. From my experience, "Feeling the keel" does NOT provide sufficient information.

6. The veterinarian or support staff does not spend considerable time discussing proper diet with you. The most common cause of medical problems seen in avian medicine is STILL malnutrition; proper diet is therefore crucial and should be discussed in depth.

7. They schedule bird appointments every 10-15 minutes. There is a tremendous amount of time involved when seeing birds – the avian veterinarians I know schedule bird appointments for a minimum of 30 minutes, with most lasting considerably longer than that. New bird clients are generally booked for an hour, as there is so much information that needs to be shared.

8. They don't think routine check-ups are necessary. The AAV recommends annual visits, especially with very young or old birds. A veterinarian in my area recently told the first-time Parrot owner of an unweaned macaw chick that he didn't need to bring the baby back in "unless he thought there was a problem."

As far as I am concerned, that is very bad advice. Weaning is an extremely stressful period in a Parrot's life, and a brand new Parrot owner often doesn't know there is a problem until it has reached emergency status. This is NOT the best thing for the bird!

9. They consider a beak trim to be just as routine as a nail trim or wing clip. A normal Parrot beak rarely if ever needs trimming, whether the bird chews on a "beak conditioner" or not. A change in the growth pattern of a Parrot's beak could be indicative of a medical problem.

10. With a new bird check-up, the veterinarian does a physical exam and pronounces the bird "healthy" without recommending any diagnostic testing. A properly done physical exam can tell an experienced avian veterinarian a great deal, but by itself, it simply isn't enough. Diagnostic testing such as blood work must be done to rule out the possibility of latent disease.

The Grand Tour

If possible, ask for a tour of the hospital. If your veterinarian is serious about avian medicine, you should see some basic equipment:

1. A gram scale capable of weighing birds with great accuracy (already mentioned)
2. Incubator cages for hospitalized birds
3. Proper diet for hospitalized birds – not just "Parrot mix" and pellets, but fresh or frozen vegetables and fruits, also.
4. Ideally, a separate room for hospitalized birds, away from dogs and cats.

Proper Teaching

If your bird is sick and needs you to medicate at home, it is incredibly important that you should be properly taught how to accomplish this. You should NOT, for example, be told to "squirt it in the back of the mouth." Medicating by mouth incorrectly can lead to aspiration pneumonia and death, so it is critical (understatement of the century) that you be instructed correctly.

Unrelated but Extremely Important

While I'm on the subject of avian veterinarians, I do want to mention something that is unrelated but extremely important. DO NOT ASSUME that your avian veterinarian will be available off-hours if you and your bird have an emergency. After all, emergencies rarely seem to happen during the working day. So an important question to ask is how does your avian veterinarian deal with emergencies?

Are they available 24 hours a day, 7 days a week? If not, to whom do they refer? Does that hospital have experience with birds?

If your veterinarian does not have emergency back-up for avian patients, then you need to find someone who does. The LAST thing you need to do is to wait for an emergency to happen, and THEN start looking around for a bird veterinarian. **ASK YOUR AVIAN VETERINARIAN ABOUT EMERGENCY COVERAGE NOW.**

In Conclusion...

If your veterinarian fulfills all these criteria, chances are excellent that you have a qualified avian practitioner. Stick with them, be patient if they don't call you back in two minutes if you have a question. Ask them to explain things you don't understand, especially when it comes to the care of your bird.

However, be reasonable, and don't expect them to spend hours on the phone with you answering every little question you might have. But most importantly, please, when it comes to the treatment of your animal, follow their instructions to the letter. The best avian veterinarians in the world can accomplish little without the full cooperation of their clients.

et birds have been described by some as moody: playful and loving one minute, demanding and aloof the next. Sometimes very obvious and sometimes very subtle, a bird's body language can give you insight into what your bird needs and wants. Although parrots and other birds communicate through different body languages, the following behaviors are observed in most pet birds, some more often than others, and some more prominently than others. Observing your bird's eyes, vocalizations, wings, tail, beak, and overall posture can be very telling.

Eyes

Unlike humans, birds are able to control their irises, enlarging and shrinking their pupils rapidly. This display is called "flashing" or "pinning" and birds may do this when they are excited, greatly interested in something, or when they are angry, frightened, or aggressive. Eye pinning should be taken into context with the bird's immediate environment and body posture to get an accurate emotional reading.

Vocalizations

In the wild, birds use various vocalizations to warn others of danger, attract mates, protect their territory, and maintain social contacts. Most birds are highly vocal and many times may be trying to communicate with you.

- Singing, talking, and whistling: These vocalizations are often signs of a happy, healthy, content bird. Some birds love an audience and sing, talk, and whistle the most when others are around. Other birds will remain quiet when others are watching.

- Chattering: Chattering can be very soft or very loud. Soft chatter can be a sign of contentment or can be the practice of a bird learning to talk. Loud chatter can be an attention-getter, reminding you that she is there. In the wild, birds often chatter in the evening before going to sleep to connect with other flock members.

- Purring: Not the same as a cat's purr, a bird's purr is more like a soft growl that can be a sign of contentment or a sign of annoyance. When purring, the bird's environment and other body language should be taken into consideration to determine what the bird is expressing.

- Tongue-clicking: By clicking her tongue against her beak, your bird may be entertaining herself or asking to be petted or picked up.

- Growling: Not heard in all pet birds, growling is an aggressive vocalization. If your bird is growling, examine her environment and remove anything that may be bothering her. Growling birds should not be handled as they do not want to be touched.

Wings

Wings are not always meant for flying; they often are used to communicate.

- Wing flapping: Wing flapping, or flying in place, is used as exercise, to get your attention, or just display happiness. Birds may often simply lift their wings as a means to stretch or to cool themselves.

- Wing flipping: Wing flipping can mean many different things such as being angry or in pain. Flipping can also be used to fluff the feathers or get the feathers to lay just right. Wing flipping accompanied by hunching of the shoulders and head bobbing is attention-getting and often means that a bird wants to be fed. Flipping may also be a mating behavior. In this case, giving attention will stimulate egg laying and should be avoided.

- **Wing drooping:** Young birds must learn how to fold and tuck in their wings and often let their wings droop before learning this. However, in older birds, wing drooping may indicate illness. If the bird has just physically exerted herself or has recently bathed, she may let her wings droop from tiredness or to let the feathers dry.

Feathers

A bird's body language includes how she holds her feathers.

- **Ruffled feathers:** Birds will ruffle or fluff their feathers during the preening process. This helps remove any dirt or feather dust, and also helps to return the feathers to their normal position. Birds may also be observed fluffing their feathers as a way to relieve tension. If cold, a bird may also fluff her feathers. Finally, if a bird's feathers remain fluffed, it could be a sign of illness and she should be checked by your veterinarian.

- **Crest position:** Birds such as cockatoos and cockatiels have a large, expressive crest. A contented, relaxed bird will usually have the crest held back, with just the tip tilted up. If she is excited about seeing you, a new toy, food item, etc., she will often lift her crest. If, however, the crest is held very high, it indicates fear or great excitement, and should be taken as a warning. An aggressive or alarmed bird may hold the crest flat while crouching and hissing.

- **Quivering:** Quivering may occur when the bird is frightened, overly excited, or part of breeding behavior.

Tail

A bird's tail feathers, like other pets' tails, are also used to communicate.

- **Tail wagging:** A bird, like a dog, may wag her tail to tell you that she is glad to see you. Tail wagging can also be a precursor to defecating. This is often helpful if you are trying to housetrain your bird. For more information on housetraining your bird, see the article [Housetraining \(Potty Training\) Birds](#).

- **Tail flipping:** Tail flipping is a general sign of happiness and can be seen when she is happy to see you, plays with her favorite toy, or gets a treat.

- **Tail bobbing:** Tail bobbing accompanied by rapid breathing that follows strenuous exercise is your bird's way of catching her breath. If, however, your bird is bobbing her tail feathers and breathing hard without activity, she may be showing signs of respiratory distress or infection. If this occurs, see your veterinarian.

- Tail fanning: Fanning the tail feathers often accompanies other behaviors in a show of aggression or anger. Spreading out the tail feathers is a show that displays the bird's strength and vitality.

Legs and Feet

The legs and feet are not used as often as other body parts to communicate but they are some of the most interesting of bird behaviors.

- Foot tapping: Some birds, especially cockatoos, will tap their feet as a sign of dominance over their territory. This usually only happens when they feel their territory is threatened.

- Weak legs: Some birds that do not want to stand or perch for themselves display the sudden onset of "weak legs." This most often occurs when you have been handling them and must put them back in their cage; it is their way of resisting. Simply hold and pet the bird a while longer and, when she feels she has been given adequate attention, her legs will suddenly become strong enough to perch. Some birds become very good at this behavior and make it routine.

- Hanging upside down: Some birds consider hanging upside down a natural part of their behavior. When doing this, they are happy and content with their environment.

- Scratching on the cage bottom: Birds from those species who normally forage on the ground for food, like the African Grey, may scratch on the floor of the cage, much like a chicken.

Beaks and Head

The beak is used for several functions from grooming to cracking nuts and seeds. It can be used as a weapon or to build a nest. There are also many ways a bird uses her beak to tell you things.

- Grinding: Beak grinding is often a sign of contentment in birds and is heard most often as the bird falls asleep. It is characterized by the side-to-side sliding of one beak over the other. It is believed by some experts that birds grind their beaks to keep them in their best condition.

- Clicking: Clicking of the beak, or the back and forth sliding of one beak tip over the other, can mean several things. If she clicks once and pins her eyes but is otherwise unthreatening, she is greeting you or acknowledging something. If she clicks several times in a series, she is giving a warning and should not be handled. Beak clicking is seen most often in cockatiels and cockatoos.

- Wiping: It is common to see a bird wiping her beak after eating. Often, the bird will wipe her beak on a perch, the cage floor,

or the cage sides to get it clean. Some birds use beak wiping as a way to mark their territory. This behavior may be seen in birds when introduced to others or kept in areas in which other birds are near.

- **Biting:** Birds will bite for several reasons so it is important to observe other behaviors and the bird's immediate environment to determine the reason behind it. Defending territory, being fearful, or being angry can all cause a bird to bite. An open beak combined with a crouching position and hissing is a definite indication that the bird is prepared to bite.

- **Chewing:** Most birds enjoy chewing and do it for many reasons including to condition their beaks and to entertain themselves. A variety of chew toys should be provided to keep your bird stimulated and interested and to keep her from chewing, and possibly ingesting, inappropriate things.

- **Regurgitating:** Regurgitation is the expulsion of contents from the mouth, esophagus, or crop. If your bird pins her eyes, bobs her head and stretches out her neck, then regurgitates her dinner, she is showing you a great deal of affection. Birds feed their young by regurgitating food and breeding pairs often do this for each other as a part of bonding.

- **Mouthing:** One way birds play is to grab each other's beaks and wrestle. They will often use their beaks to joust at one another during play.

- **Head shaking:** It is very common for African Greys to shake their heads. The reason for this is not well understood.

- **Head bobbing:** Birds who want attention, may bob their heads back and forth.

Postures

Overall body posture is important in determining what your bird is trying to tell you. Some postures have specific meanings; below are a few of the common bird postures.

- **Relaxed:** If the bird has a relaxed body and her head and body are at attention, she is happy and content.

- **At Attention:** If her head and body are at attention but her body is rigid and her feathers are flared, she is letting you know she owns that territory.

- **Bowing:** When a bird is crouching with her head tipped downward toward you, and perhaps bobbing her head, she is asking to be petted or scratched.

- **Head down:** If she is crouching with her head down with a relaxed body and raised wings, she is trying to attract attention, either from you or from a potential mate.

- **Aggressive:** If a bird is crouching with her head down, eyes pinning, flared tail feathers, ruffled feathers, and a rigid body, weaving from side to side, she is giving a warning and won't hesitate to bite if provoked, even in the most minor way. If this stance is accompanied by an urgent walk toward you, it is best to get out of the way until she has time to cool off. Hissing and a raised crest may be additional clues that the bird is in an aggressive state.

- **Lying on back:** Though probably uncommon in the wild, some pet birds will lie on their backs, and may even sleep in that position.

- **Elimination posture:** Prior to defecating, a bird may take several steps backward, crouch, and lift her tail.

Birds use their body and body parts to communicate messages to others. These messages are sometimes very obvious and almost any animal could interpret their meaning. Other body language may be subtle and experience will be needed to interpret it correctly. Many species have their own body languages, while many body languages cross the bird-species border. Communicating with your bird by observing and interpreting her body language will make your relationship much easier and satisfying for you both.

● **A note to rehabilitating an abandoned Macaw/s**

Chapter 7: HOW TO MAINTAIN MACAWS

Grooming of Macaws-Pet Bird care is a crucial part of ensuring that you keep a bird that is a source of pride on confidence. The Wings should be kept trim to avoid flight and or loss of the pet. Neatly clipping at least 10 feathers closest to the wing tip is ok.

The beak needs to be trimmed if it becomes overgrown or deformed. Providing mineral blocks and lava block will help your bird keep its beak in shape. The claws are easily controlled by concrete type perches but should be trimmed if they become overgrown

Maintenance and handling of Macaws

Macaws are quite distinct and easy to recognize with their large heads, strong curved beak, and an elegant long tail. Pet Macaws adapt well to captivity, adjusting easily to their cage or aviary and their new .

Colours

The large macaws tend to have the most exotic feather coloring. Mini macaws are primarily a bright green with a few color accents on their shoulders or tails. A number of macaws have been cross bred, producing quite a variety of hybrid macaws. Hybrid macaws have brilliant variations on the normal coloration of their parentage.

Training Macaws-from screaming and biting

As a Macaw grows it discovers the strength of its beak and take a tendency to disciplining us those around it. Once beyond the baby stage, it is essential to train the bird from biting so it will grow with friendliness. The basic principle to let the bird learn that you are a good person and a friend. This will nature a positive association. Let your bird associate you with good things like songs, a toys, and food.

Training a Macaw is based on trust. Let the bird pick conversations and reward it with food or petting as a way to nature the relation. Just like dogs learn to associate with their owners, the same goes for Macaws.

Capture, restrain and handle correctly

Macaws may require restraining for several reasons like change of shelter, transportation , examination by a vet. The note here is to avoid injury to the bird and to the handler and to prevent escape.

Birds are prey animals: fear and discomfort are likely to trigger a “fight or flight” response. They will often lunge or bite to escape. The bird is captured by using one swift motion to pick it up and wrap towel securely around bird. Ensure towel is wrapped around the wings and the that bird’s head peaks out of towel. Keep a firm, but not a too tight, grip, on the body and ensure that both feet are still.

Equipment needed in handling a Macaw

The Vet will need a mouth speculum, bright light source, syringe and needles, microtainers, slides, and swabs. Towels or paper towel of a good size. Towels should not have loose threading's that can catch on body parts.

DOS AND DONT'S

A Macaw owner may want to do all the things right, then they must learn the don'ts for Macaws. Bad behaviors for macaws should not be tolerate, not with a lifespan of over 80 years.

Consider the messiness of birds at home, should you need a spotless floor, then a Macaw may not be a welcome pet.

Although parrots are beautiful but they are also a lot of work.

Respiratory or noise sensitivity Problems – Family members with allergies related to birds must be considered when getting a bird for a pet..

Limited Space – Birds need adequate size cages that may not fit in a small home. This is especially true for the larger parrot breeds.

Sleep Time – it is not advisable to sleep with a pet bird.

Proper Petting – Birds should be petted around the head only.

Avoid letting other birds walk on the floor after pets and humans have walked on the same. Parrots eat with their feet so risk is higher of getting sick if they are always on the floor.

Women should NOT kiss the bird in the mouth for the reason that they carry yeast, even if they don't have an active infection, in their bodies and can be a silent killer among your pet birds.

- **Travelling with a Macaw**

Travelling with your pet Macaw should be an outdoor opportunity for fun and relaxation.

Always contact the airlines first, making sure they 1) accept birds in the cabin and 2) to make an advanced reservation for your bird if they do. Most airlines will only allow two pets of any kind in the cabin per flight.

Purchase an airline-approved cage, one that fit under the seat in front of you. For larger birds, you may consider purchasing a seat or have specialized shipping arrangements.

Ahead of travel, clip your bird's wings and nails to make it easier for you as the handler and prevent an unfortunate loss if your bird somehow slips in the airport.

Obtain a Vet health certificate for your bird within 10 days of your departure.

Clearly label the cage with a "live animal" sticker as well as your own personal identification, including where you can be reached at your destination.

Need help with determining whether your bird is an eager companion? Try answering out:

1. Is your bird accustomed to a routine
2. How long will your bird stay comfortably in his cage?
3. Does your bird get motion sickness? Like humans, your bird can experience motion sickness.
4. Is your bird healthy? Travel causes stress for owners and their pets
5. Is it legal to transport your bird on this route? Believe it or not, depending on the species of your bird, it may not be..
6. Will the trip and the destination be safe?
7. Will you have time for your bird at your destination? Travel tips

If you decide your bird would be a good traveler, here are some tips to add to your mutual enjoyment and safety.

Cleaning supplies to take along:

- Cage liners
- Paper towels and/or cage wipes
- Cleaning cloths
- Bird-safe disinfectant
- Sandpaper
- Scrub brush and/or old toothbrush

As you clean a bird's cage, watch for signs of disease or injury

As you clean, it is important to look for any signs that your bird may not be feeling well. Also, watch for hazardous conditions in the cage, and remove or correct them. Observe:

- Has the normal amount of food been eaten?
- Is there any regurgitated material in or on the cage?
- Are the droppings normal in appearance and number?
- Are there feathers present? Do they look normal?
- Do any of the toys appear frayed and need to be replaced?
- Are the bars and welded portions of the cage in good repair?

Daily cage cleaning

Disinfectants

- Selecting the proper disinfectant for bird cages must be done carefully. To get correct dosage to clear germs and not harm the birds. Keep birds away while disinfecting. Remember to remove all droppings and seed remains before using the disinfectant. Allowing 10-15 minutes contact with disinfectant is recommended

Liners: The liner of the cage should be replaced daily. Newspaper (black and white ink only),

Dishes: Food and water dishes should be washed in hot, soapy water, and dried thoroughly. To avoid waste, fill the dishes with only the amount the bird will eat until the dishes are cleaned again.

. Stainless steel or high impact plastic dishes are recommended since they clean easily and can withstand repeated washings, hot water, and disinfectants.

Accessories: If you have a birdbath in the cage, it should be removed, washed in hot soapy water and/or disinfectant, rinsed very well, and refilled with fresh water.

Surrounding area: Sweep or vacuum the floor to remove seeds, hulls, feathers, and other debris.

Weekly/monthly cage cleaning

This depends on the number of birds one has.

1. Assemble supplies in place ready for the clean up.
2. When cleaning, place a garbage can next to the cage, to make it easier...
1. Remove the bird and toys to safe surroundings,
2. Remove all toys and accessories from the cage.

3. Remove any feed remains and scrub the cage with hot soapy water. Hand held sprays may also be used and the cage later soaked in disinfected water before air drying.
4. Remove droppings from perches and toys with and use sandpaper to remove droppings before disinfecting and discard any perch or toy that does not come clean, is frayed, or broken. The cleaning should be extended to play gym, auxiliary cages, and other areas in which the bird plays or lives.
7. Place all the dry items back in the dry cage, put in a clean liner, fill the food and water dishes, and pat yourself on the back as you bring your bird back, to his sparkling home.

Taming a wild macaw

The Macaw should be placed under acclimation and if proved safe, the train may begin with taming lessons. It is important for the keeper to be aware that a Macaw requires attention as much as its maintenance. If one has busy schedules, they can schedule and hire a professional trainer to do this take for the. However, The must still create and nature a relationship as that of the trainer is short-term.

Ideal equipment for taming should be put in place, starting with a cage that has large doors that open centrally, such encourage the Macaw to leave the cage. A separate stand for training the bird, which should not be within the cage, this will create a better atmosphere from the cage for socialization. The trainer should also keep reading the mood of the bird to always avoid being bitten by it.

Rescue equipment need to be accessible to fetch the bird whenever it may get under a sofa or even electric cables. Hand/welding gloves are not recommended, they may be assumed to avoid bites but reading the mood overrides the same.

During the early stages, it is not advisable to arm tame, until really satisfied that the bird can coordinate with you. There are six basics for the initial lessons and they include;

Stick training –the first lesson of simply opening the cage door and allowing the bird out of the cage. Some nervous birds may initially decide not to leave the cage.

The Stand training which involves teaching the macaw to step onto and off the perch.

The other steps include the arm training, leaving and returning to the cage on training stick and arm, leaving and returning to the training stand on stick or arm and accepting food reward and liquid refreshment from the trainer

Entertainment and how you can earn from keeping Macaws-bloggers and Vloggers

Macaws love fun and due to their interactive nature, playing with one nature a strong bond. The company provided by them has some intelligent level that is bound to make your day. Talk of calling a Macaw by name and it flies from the cage and perches on your shoulder, tell it back and flies back to the cage.

For the human nature, the few distractions from the daily and repetitive routines often relaxes many of us. The mimicking of speech, songs, winking and so forth are part of the fun.

The keepers of Macaws have opportunities to share around the globe.

As part of challenge and learning more, there are numerous forums over the internet where keepers post the limits exhibited by their pets. Some are so passionate about as they post their blogs daily about it. There is group that has taken parrotting a level high, they are trainers, Vets and just passionate keepers who upload tutorials over websites to attract traffic, which of course they gain from. It's amazing what Macaws can do, all over the world from the pet lovers.

Stories, Poems & Humor

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