#### The

# **Companion Bird**

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More veterinarians than ever are willing to treat companion birds. The quality of avian medicine has greatly improved over the years as evidenced by the increase in numbers of professional publications, scientists pursuing companion bird research and continuing education opportunities. In the United States, the Association of Avian Veterinarians (AAV) began in 1980 as a group of 175 veterinarians. Today, membership tops 3300 veterinarians from 43 countries.5 The explosion of new information, treatment and surgical protocols provides opportunities to practice avian medicine at very high levels. This also represents a double-edged sword, as those wishing to provide veterinary care for companion birds must be willing to practice at this advanced level and stay abreast of the current standard of care. It is no longer acceptable for veterinary professionals to proclaim the pet to be "just a parakeet" and inform the owner there is not much that can be done.

In 1993, the American Board of Veterinary Practitioners established a board specialty for avian practice, with rigid requirements for certification. In 2002, there were 92 board-certified avian specialists in 22 states, and in Canada and the Netherlands.1 Outside the USA, the European College of Avian Medicine and Surgery (ECAMS), established in 1993, and Australia's avian veterinary specialist program provide similar advanced degrees.8 Certified avian specialists should be viewed as a valuable resource for those desiring second opinions and referrals on difficult cases. As in any medical referral situation, human or veterinary, referring veterinarians should provide complete medical records including radiographs and laboratory results to the referral veterinarian and expect a timely response, written report and complete follow-up recommendations.

### Pet Bird Ownership in the United States

The popularity of pet birds, especially psittacines, remains strong.<sup>2</sup> However, an American Veterinary Medical Association (AVMA) survey covering 1991 to 2001 showed that the percentage of households owning pet birds and the actual numbers of birds kept as pets had decreased. In that time period, numbers of birds owned as pets decreased from 11 to 10.1 million.<sup>4</sup> According to most recent statistics, more than half of USA households own a companion animal, and of these households, approximately 4.6% own pet birds. Yet another survey covering 2001 to 2002 by the American Pet Products Manufacturing Association (APPMA) showed 6.9 million homes owned a bird. This survey conflicts with data generated by AVMA and actually reports the number of households owning birds as slightly increasing.

Birds remain the most popular specialty or exotic pet, second only to fish. As a comparison, less than 2% of households owned pet rabbits. All other exotic pets surveyed, including ferrets and reptiles, were well below one half of 1%. Practitioners seeing even modest numbers of pet birds will affirm APPMA statistics proclaiming the cockatiel as currently the most popular pet bird species in the USA (Table 2.1).

Bird ownership was strongest in the Pacific and Mountain regions of the USA in 2001, while the lowest percentage of bird owners lived in the West, North and Central regions.

**Table 2.1** | Numbers and Types of Avian Patients Seen in 1 Year at a Busy Avian Practice $^{16}$ 

Patient	#	Patient	#	Patient	#
Blue-fronted	44	Nanday	9	Hybrid	14
Double yellow-headed	32	Mitred	6	Bronze-winged	3
		Sun	22	Maximillian	7
Lilac-crowned	15	Red-sided	11	White-capped	9
Orange-winged	8	Solomon	20	Budgerigar	99
Red-lored	11	Grand	2	Cockatiel	240
Spectacled	10	Vosmaeri	9	Lovebirds	50
Yellow-naped	40	Blue and gold	90	Senegal	33
Goffin's	38	Blue-throated	2	Indian ring-	10
Lesser sulfur-	10	Green-winged	19	necked	10
crested		Hahn's	11	Canary	20
Moluccan	46	Hyacinth	12	Congo A. Grey	122
Umbrella	59	Illiger's	1	Timneh A. Grey	16
Galah	15	Military	7	Chicken	18
Blue-crowned	20	Scarlet	13	Duck	16
Green-cheeked	20	Severe	14	Dove	5
Jenday	7	Yellow-collared	8	Flock consult	39

Typical pet bird owners do not fit a general profile, although a few statistical generalizations can be made. More owners are couples rather than single, and the majority have at least two children. Personal income does not seem to influence the likelihood of bird ownership, but level of education apparently does. Persons with advanced college degrees are much *less* likely to own pet birds. Bird owners are slightly more likely to live in urban rather than rural areas. Therefore, the "typical" bird owner in the USA may be a young couple with undergraduate college degrees, with two children, living in a large metropolitan area with a single pet bird.

Companion bird ownership appears to be popular outside the USA as well. In Australia, pet bird ownership apparently is even more popular as approximately 17% of households own a bird, with an average of 8.7 birds per household (R. Doneley, personal communication).

## Frequency of Veterinary Care

The AVMA survey indicated both good and bad news for avian practitioners. On the negative side, pet bird owners overall are not likely to seek veterinary care. In 2001, only 11.7% of bird owners in the USA reported at least one veterinary visit. In comparison, 83.6% of dog owners and 65.3% of cat owners reported at least one veterinary visit in 2001. On the positive side, however, a 6year survey indicated the average number of veterinary visits for pet birds actually increased. An estimated 2 million avian veterinary visits occurred in 2001, compared to 1.6 million in 1996. This represents a solid increase in demand for the services of avian veterinarians. More evidence for this conclusion can be seen in the fact that veterinary expenditures for bird owners increased dramatically from 37 million dollars in 1991 to 135 million dollars in 2001.

It is interesting to note those veterinary services most commonly purchased for pet birds. Examinations are purchased most frequently, followed by laboratory tests, then emergency care. In comparison, emergency care is not even listed in the top five services most commonly purchased by dog and cat owners. This does not suggest that emergency care for dogs and cats is uncommon. However, it does support what many avian practitioners already suspect. While many bird-owning clients appreciate the value of preventive medicine, far too many others consult the avian veterinarian only in time of medical crisis.

Slightly more than half of surveyed clients selected their regular dog and cat veterinarian to provide care for their



**Fig 2.1** | While undoubtedly popular, birds like canaries and finches are not presented as frequently for veterinary care as are birds more likely to bond with their owners.

avian pets. Encouragingly enough, 24.2% made their selection based on the fact that the veterinarian was a bird specialist. (Note that this survey does not distinguish between veterinarians who are board-certified specialists and those claiming a "special interest" in avian medicine). Discouragingly, just as many clients chose a veterinarian based simply on location.

It is obvious avian practitioners have a great deal of work to do to catch up to our fellow dog and cat practitioners. While bird owners who do seek regular veterinary care are generally seeking a higher quality of care and more frequent visits for their pets, it is obvious the great majority of bird owners either are unaware such services are available or not convinced of their value.<sup>4</sup>

#### The Human-Bird Bond

There is no doubt that many owners develop a deep attachment to their birds, due in part to their relative longevity. A recent survey of bird-owning clients of a busy avian practice revealed that most owners consider their pets equal in importance to family members. 11 This must be contrasted, however, to the growing problem of unwanted birds, to which organizers of parrot rescue facilities can readily attest. Human-bird interaction studies indicate that birds play many of the same roles for people as do dogs and cats. Some significant differences between human-bird and human-dog/cat interactions exists. More effort is required by the bird owner to elicit a positive response from their pet. Birds require more time to train than dogs and cats and lose pet quality faster when there is no regular interaction. It has been theorized that birds may be a more consistent stimulus for calming interaction than other pets, as owners must approach birds in a quiet, non-threatening manner to maintain a satisfying relationship.6 Birds that require less

interaction and typically do not bond to owners, like finches and canaries, are less often seen by veterinarians (Fig 2.1).<sup>16</sup>

### Pet Loss, Grieving and Euthanasia

Most owners bonded to their pets go through a grieving process of variable intensity in the face of loss of their pet. Many choose to be present with their bird during euthanasia. This necessitates that the avian veterinarian be competent and comfortable with an anxiety and painfree euthanasia process. In 2000, AVMA published a guide to humane euthanasia techniques for many pet species. Included in the list of acceptable techniques for birds was thoracic compression.<sup>15</sup> The AAV responded with an editorial requesting this technique be stricken from the list. In most situations, euthanasia can be best accomplished by first inducing general inhalant anesthesia. Euthanasia solution can subsequently be administered by intravenous injection. This technique, performed in a quiet, private area with veterinary personnel relating to the patient in a gentle, compassionate manner, is usually gratefully accepted by grieving owners.

The same survey of pet bird owners mentioned above indicated that the majority of owners would, in the event of the death of their pet bird, choose private burial on their own property. A surprising number, however, stated they would select individual cremation with return of ashes.<sup>11</sup>

Very few owners indicated they had provided for their pet in a formal or legal will in the event of their own death. The great majority of owners, however, said they had already discussed the possibility and made informal arrangements for continued care of their pet.<sup>11</sup>

#### History of Pet Bird Ownership

The literature is full of tantalizing, although not completely documentable, references to pet parrots in history. The earliest reference may be Ctesia's *Indica*, which contains a reference to a bird resembling a plumheaded parakeet (*Psittacula cyanocephala*). Aristotle gave the name Psittace to a similar bird he described. Frederick II (1194-1250) was said to enjoy the company of an umbrella cockatoo given to him by the Sultan of Babylon. In 1492, Columbus brought back a pair of Cuban Amazons to Queen Isabella of Spain. The first sighting of an Australian bird by a European was said to

be on August 22, 1699, when William Dampier spotted a flock of little corellas off the northwestern coast of Australia. <sup>12</sup> A reference on Aztec burial customs reports the burial of a prince together with a macaw. It is fascinating to consider the improbable relationship of the stereotypical pirate and his pet parrot.

### Regulations Concerning Pet Birds

While regulations exist in the USA prohibiting the ownership of some native wild birds, there are few restrictions concerning pet bird ownership. Some communities prohibit the keeping of birds that are considered to be farm animals, such as geese and chickens. Some apartment dwellings and condominiums include birds in pet ownership restrictions. International trade in birds for the pet trade, however, is regulated by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). CITES is an international agreement between governments to ensure that trade does not threaten the survival of wild animals and plants. CITES entered into force in 1975 and includes over 150 participating governments protecting approximately 5000 species of animals and 25,000 species of plants. Since the adoption of CITES, not a single protected species has become extinct as a result of international trade. Protected species are classified into three Appendices, listed I, II and III. Appendix I species are threatened with extinction, and trade is prohibited with exceptions made for specific circumstances, such as scientific research. Appendix II species are not threatened but may become so if trade is not restricted. Trade in these species must be approved and an export permit granted. Appendix III species may be legally traded, but are listed in order to solicit cooperation of other countries to ensure trade is not unsustainable. Specific permits also are required.

Under the classification Psittaciformes, 44 species are listed under CITES Appendix I, including 13 Amazon and 6 macaw species. Within the USA, CITES is enforced by United States Fish and Wildlife Service division of Management Authority. Legal importation of CITES I-, II- and III-listed species to the USA officially ended in 1993 with passage of the Wild Bird Conservation Act. Birds legally imported to the USA prior to this act still may bear an import band placed at the time of entry into a USA quarantine station. Quarantine bands are easily recognized and are imprinted with three letters and three numbers. Once birds leave quarantine, there is no legal requirement to retain the band, and most have since been removed. Domestically bred birds are commonly



**Fig. 2.2** | The solid aluminum breeder band is often inscribed with letters (breeder and state) and numbers (year of birth and ID number) The "TX" means this bird was bred in Texas.

close-banded within weeks of birth. (Fig 2.2) Closed bands are difficult to remove. They have no legal meaning other than identification. Using one of these bands to trace the origin of a bird is nearly impossible.

Although illegal importation exists, the proliferation of large corporate and small "backyard" parrot breeders supplies the pet trade with an ample number of birds at reasonable prices. Many breeders place a band on their birds when they are very young. Breeders may inscribe bands with any combination of symbols. A typical breeder band may contain a set of letters identifying the breeder, a two-letter combination indicating state of hatch, and two numbers signifying year of hatch. Interstate movement of any bird, including pet birds vacationing with owners, requires a state-issued health certificate completed by a licensed and accredited veterinarian indicating the bird is free of signs of illness. In addition, the destination state may require additional testing before the bird can cross state lines. Requirements are obtained by phoning the destination state's Board of Animal Health, or looking up requirements on each state's individual web site. That being said, many owners are oblivious to these regulations and do not request health certificates when they travel.

The destination country similarly determines requirements for entry into foreign countries. Most countries require the bird to be identified with a leg band or microchip. Requirements can be obtained by phoning the consulate office of the destination country. In the USA, international requirements can be obtained by calling the local US Department of Agriculture-Animal and Plant Health Inspection Service office (USDA-APHIS). Alternatively, requirements are posted on the USDA-APHIS web site, which also contains information for traveling with birds into the USA from foreign countries.<sup>17</sup>



**Fig 2.3** | The Endangered Species Act forbids the keeping of Queen of Bavaria (or golden) conure (*Aratinga guarouba*) for commercial purposes. Feather picking is common in this species.



**Fig 2.4** | Moluccan cockatoos (*Cacatua moluccensis*) appreciate human attention, even if it means wearing a costume.

The movement of CITES-protected species is not regulated within the USA; however, international travel with these species requires a special permit. Information on travel from the USA with CITES-protected species may be obtained from the United States Fish and Wildlife Service (USFWS).<sup>9</sup>

The Endangered Species Act was passed in 1973. This act is enforced by USFWS, which regulates commerce concerning endangered species. Any bird listed as threatened or endangered may not be traded in interstate commerce. The Queen of Bavaria or golden conure (*Aratinga guarouba*) is listed as endangered as well as several other species occasionally seen in pet practice (Fig 2.3). Under the provisions of the Endangered Species Act, these species may not be sold in interstate commerce or kept for commercial purposes. Government regulations concerning companion birds are further discussed in Chapter 1, Clinical Practice.

### Birds in Schools and Care Facilities

Birds are gaining in popularity in nursing homes and other care facilities. Birds most commonly seen in care facilities are canaries, budgerigars, cockatiels and lovebirds (Fig 2.4). <sup>13</sup> Many studies suggest the benefits of birds and other animals in care facilities. One experimental study documented better attendance and less hostility in group therapy meetings of psychiatric patients in rooms containing finches. <sup>6</sup> Local health departments may require veterinary examinations and periodic testing for animals in contact with residents. Veterinarians performing these exams must be aware they cannot certify that any bird is completely free of

potentially zoonotic diseases, in particular, chlamydiosis (see Chapter 27, Update on Chlamydophila psittaci: A Short Comment). Facility and health department personnel, along with the veterinarian, must determine a reasonable amount and frequency of testing to minimize health risk due to the presence of pet birds, especially in the presence of persons with diseases compromising the immune system. New additions should be quarantined away from existing birds and residents for at least 45 days.9 Attention must be given to proper cage construction, dietary requirements and cage additions, such as perches and toys. Birds in care facilities occasionally are subjected to multiple caregivers, or are in the care of persons with no training or interest in their well-being. Caretakers must receive adequate training in all aspects of care of their charges and be familiar with common signs of illness.

#### **Birds and Animal Welfare**

Many well-known animal welfare groups have taken stands for and against pet bird ownership. In 2002, the American Society for the Prevention of Cruelty to Animals (ASPCA) proclaimed January as "Adopt a Rescued Bird Month." The ASPCA web site contains links to a directory of birds available for adoption and worthy information on the pros and cons of pet bird ownership. People for the Ethical Treatment of Animals (PETA), an organization known for aggressive animal rights positions, encourages formulated diets and regular veterinary care for pet birds. The same organization, however, advises against any captive breeding of parrots and encourages owners to allow pet birds to select a companion bird of its own species and to free fly. The Humane Society of the USA, the largest animal welfare

Table 2.2 | General Guidelines for Recommended Pet Birds Based on General Pet Quality

Common name and/or representative species	General traits	Potential concerns	
African Grey - Congo (Psittacus erithacus)	The most demonstrably intelligent psittacine sp. Greatest potential for range of vocalizations and increasing vocabulary throughout their lives. Research has documented cognitive association between learned words and both actions and objects.	Intelligent and emotionally sensitive; i.e., prone to remember negative experiences and make associations with people and objects that may develop into phobias/neuroses. Feather destructive behavior is a very common condition in captive African greys.	OW
<b>African Grey - Timneh</b> ( <i>Psittacus</i> e. timneh) (Darker grey and smaller than the nominate Congo species)	Similar in appearance and characteristics to the nominate species noted above.	Both positive traits (learning ability) and negative traits (neurosis, obsessive behavior) are usually somewhat reduced in this subspecies compared to the nominate species.	OW
Amazons (Amazona spp.)  • Yellow-naped (A.ochrocephala auropalliata)  • Blue-fronted (A.aestiva)  • White-fronted (A.albifrons)  • Orange-winged (A. amazonica)  • Mealy (A.farinosa)  • Festive (A.festiva)	Active, fairly hardy. Tend to become bonded to certain individuals and aggressive toward others. Some are excellent talkers (eg, yellow-nape, double yellow-head, blue-fronts).	Screaming, territoriality, and aggression are common. Learn quickly to use lunging or biting to relay their negative opinions. Quieter species include: spectacled (white-front) orange-winged, mealy, festive	NW
Budgerigars (Melopsittacus undulatus)	Can be interactive, enjoyable pets.	Genetic predisposition to many diseases and neoplastic conditions.	ow
Caiques (Pionites sp.)  Black-capped (P. melanocephala)  White-bellied (P. lucogaster)	Beautiful, small parrots, playful personalities	Although difficult to locate, this genus is a favorite recommended species. Not known for their talking ability.	NW
Cockatiels (Nymphicus hollandicus)	Intelligent, popular pets. Can become very attached to the owner or to conspecifics.	Chronic egg-laying in some females. Aggression may develop in males as they mature (especially toward children). Color mutations may be more prone to illnesses.	OW
Cockatoos general (Cacatua sp.)	Enjoy physical contact. Vocabulary is limited but intelligible and often endearing.	Screaming, mate aggression (conspecific or surrogate) may be severe. Occasional unpredictable severe biting episodes, even with humans to which they are bonded. (Note: Powderdown production is pronounced, and is not only a cleaning concern, but can cause allergic reactions in some people and in some macaws)	ow
Smaller Cacatua sp. • Goffin's (C. goffini) • Red-vented (C. haematuropygia) • Bare-eyed (C. sanguinea sanguinea)	More active than other, larger cockatoos.	Can be hyperactive. Not as predictably accepting of cuddling and petting.	OW
Larger Cacatua sp. • Umbrella or white cockatoo (C. alba)	Enjoy cuddling, petting, and prolonged physical contact.	Can develop behavioral and medical problems, (screaming, feather destructive behavior, self- mutilation, vent prolapse) related to their demand for physical stroking and/or other psy- chological captive abnormalities.	OW
Moluccan or salmon-crested cockatoo (C. moluccensis)	As with umbrellas, but can be less predictable and even aggressive.	Often escape artists. Behavior problems, as with umbrella cockatoos above, can occur. May be very destructive with their beaks.	OW
Conure (Aratinga sp.)  • Sun (A. solstitialis)  • Jenday (A. jandaya)  • Gold-capped (A. auricapilla)	Beautiful, intelligent birds.	Loud, high resonance screams. Can become territorial. Not known for their talking ability.	NW
Conure • Nanday (Nandayus nenday)	Historically, were common imports and relatively inexpensive. Captive-raised individuals can make excellent pets.	Established feral colonies of nanday conures exist in parts of south Florida. May develop loud and persistent screaming behavior.	ZW
Conure • Patagonian (Cyanoliseus patagonus)	Beautiful, larger conure. Relatively quiet.	Historical documentation as carriers of Pacheco's disease virus has made owners wary of introduction into their collection. This may still be a valid concern in multiple-bird households.	NW
Conure (Pyrrhura sp.)  • Green-cheeked (P. molinae)  • Black-headed (P. rupicola)  • Maroon-bellied (P. frontalis)	Smaller and generally quieter than Aratinga sp. conures.		NW
Doves, Pigeons (Columbiformes)	Gentle, excellent pets. Although the degree of interaction (vocal, body posturing) is limited, there is little or no danger of injury to humans from bites.	If raised by humans may have no fear or defense against dogs or cats	OW NW
Clectus sp. (ten subspecies) Red-sided (E. roratus) Vos (E. vosmaeri) Solomon Island (E. solomonensis)	Most pronounced sexual dimorphism of any psittacine. "Pensive" when considering novel items or situations in a secure environment, leading to the misconception that eclectus are dull-witted. Moderately good talkers. Males tend to be more docile than females.	Unless socialized early, may become alarmed by new situations or locations. Feather destructive behavior common. In breeding situations, females will often traumatize males.	OW
Finches, Canaries (Passerines)	Easy to care for, quiet, pleasant vocalizations. Limited ability to interact with their owners as compared to psittacines.	Inbreeding has created genetic predispositions to multiple disease syndromes in some lines.	OW

Chapter 2 | THE COMPANION BIRD

Table 2.2 | General Guidelines for Recommended Pet Birds Based on General Pet Quality

Autodor/hynchus hycarith/inus)   Largest psitiscine. Beautiful bird. Temperament (Arnodor/hynchus hycarith/inus)   con be coloner than orther microws. The international meads and phanes of specific nutritives.	Common name and/or representative species	General traits	Potential concerns	
Rainbow (Trichoglosus heematodus) Rainbow (Trichoglosus heematodus) Raid (Ees bornea)  Lousky (Pseudess fuscata)  Can be very tame and bonded to people or other birds. Rischeri) Fischar's (A. Rischeri) Feach-faced (A. roseicollis)  Macaws (Aro sp.) Blue and gold (A. arorauna) Scarel (A. macao) Mini-macaws Forem-winged (A. chloroptrus)	Hyacinth macaw	can be calmer than other macaws. The attending veterinarian needs to be aware of specific nutri-	tations, this species can become neurotic/pho- bic. Research into the parents' temperament is	NW
* Fischer's (A. fischeri) * Peach-faced (A. roseicollis)  **Macaws (Ara sp.) **Blue and gold (A. ararauna) **Scarled (A. macao) **Today (A. ararauna) **Today (A. ararana) **Today (A. ara	Rainbow (Trichoglossus haematodus)     Red (Eos bornea)	aviary birds, but can be quite tame when captive raised. Beautiful colors and brilliant sheen to	with Aratinga sp, their beak sharpness and their	OW
**Blue and gold (\(\alpha\) carraunal) training and structured play to focus their energies. Green-winged (\(\alpha\) chloropterus) scarlet (\(\alpha\). maccos  **Mini-maccos**  **Cardet (\(\alpha\). maccos**  **Can be excellent, affectionate and intelligent pets. Noble (\(\alpha\). n. cumanensis) severe or chestnut-fronted (\(\alpha\) care were)  **Noble (\(\alpha\). n. cumanensis) severe or chestnut-fronted (\(\alpha\) care severe)  **Mini-maccos**  **Severe or chestnut-fronted (\(\alpha\) care severe)  **Morahs**  **Indian hill mynah (\(\alpha\) cridotheres tristis)  **Indian hi	Fischer's (A. fischeri)		Can be very aggressive during breeding season.	OW
* Yellow-collared (Ara auricollis) * Noble (A. n. cumanensis) * Noble (A. n. cumanensis) * Severe or chestnut-fronted (Ara severa) **Mynahs **Indian hill mynah (Acridotheres tristis) **Total passerines.**  Excellent mimics. Have the same interactive limitations as the small passerines.**  Indian hill mynah (Acridotheres tristis)  Grass parakeets (Neophema sp.) **Bourkes (N. bourkei) **Turquosines (N. pulchella)  Pionus sp. Parrots **Obusky (P. fuscus)  Plosty (P. fuscus)  Poicephalus sp. Parrots **Senegal (P. senegalus) **Nyers (P. energalus) **	Blue and gold (A. ararauna)     Green-winged (A. chloropterus)	highly interactive and energetic. Require frequent	Loud; screaming can become a problem. Generally develop a limited vocabulary. Learn	NW
• Indian hill mynah (Acridotheres tristis)  Grass parakeets (Neophema sp.) • Bourkes (N. bourkii) • Turquosines (N. pulchella)  Pionus sp. Parrots • Bronze-winged (P. seniloides) • Myers (P. meyeri)  Quaker parakeet (Monk) (Mylopsitta monachus)  Playful, active, usually gentle, fairly hardy. • Mustcored (P. alexandri) • Dusky (P. fuscus)  Generally, limited ability to mimic speech compared to Amazons. Produce a rapid "sniffing" sound when frightened that is often mistaken for respiratory disease.  Playful, active, usually gentle, fairly hardy. • Senegal (P. senegalus) • Myers (P. meyeri)  Quaker parakeet (Monk) (Mylopsitta monachus)  Intelligent, feisty birds, with moderate talking ability. Hardy, including tolerance of colder environments. Colony breeders.  Ring-necked Parrots (Psittacula sp.) • Were previously thought to be "aviary birds" until captive breeding produced tame, human-oriented individuals.  Toucans (Ramphastos sp.) • Keel-billed (R. sulfuratus) • Toco (R. toco) • Channel-billed (R. vitellinus)  Vaterfowl • Geses (Anser sp.) (Branta sp) (Nettapus sp.) • Muscovy (Cairina moschata)  Usually gentle, smaller and quieter than the related hardy.  Generally quiet, can be tame and personable. Were previously thought to be "aviary birds" until captive breeding produced tame, human-oriented individuals.  Few, except Old World species disease susceptibility, Sone new color mutations may be genetically predisposed to problems.  Including low iron and some live prey. Prone to iron storage disease. Voluminous, messy stool.	Yellow-collared (Ara auricollis)     Noble (A. n. cumanensis)     Severe or chestnut-fronted	Can be excellent, affectionate and intelligent pets.	were bred in captivity following cessation of importation. Therefore the current availability is low and the genetic pool is limited for many	NW
**Bourke's (N. bourkii) **Turquosines (N. pulchella)  **Pionus sp. Parrots **White-headed (P. seniloides) **Bronze-winged (P. chalcopterus) **Dusky (P. fuscus)  **Policephalus sp. Parrots **Senegal (P. senegalus) **Senegal (P. senegalus) **Wyers (P. meyeri)  **Quaker parakeet (Monk) (Myiopsitta monachus)  **Ring-necked Parrots (Psittacula sp.) **Derbian (P. derbiana)  **Generally quiet, can be tame and personable. Were previously thought to be "aviary birds" until captive breeding produced tame, humanoriented individuals.  **Generally quiet, can be tame and personable. Were previously thought to be "aviary birds" until captive breeding produced tame, humanoriented individuals.  **Toucans (Ramphastos sp.) **Keel-billed (R. sulfuratus) **Toucans (Ramphastos sp.) **Channel-billed (R. vitellinus)  **Waterfowl **Usually gentle, smaller and quieter than the related Amazons. Playful, active, usually gentle, fairly hardy.  **Coan become territorial with sexual maturity.  **Can become aggressive. Tendency to become obese and a relatively high incidence of pancreatic problems. Illegal in some US states due to their propensity for establishing feral populations, even in temperate climates.  **Generally quiet, can be tame and personable. Were previously thought to be "aviary birds" until captive breeding produced tame, humanoriented individuals.  **Toucans (Ramphastos sp.) **Sene New Sene Voluminous may be genetically predisposed to problems.  **Dietary requirements can be difficult to fulfill, including low iron and some live prey. Prone to iron storage disease. Voluminous, messy stool.  **Waterfowl**  **Waterfowl**  **Waterfowl**  **Waterfowl**  **Wuscovy (Cairina moschata)  **Usually gentle, may be aggressive during breeding. Outdoor environment highly recommended.  **Waterfowl**  **W	1 7			OW
<ul> <li>White-headed (P seniloides)</li> <li>Bronze-winged (P: chalcopterus)</li> <li>Poicephalus sp. Parrots</li> <li>Senegal (P: senegalus)</li> <li>Myers (P: meyeri)</li> <li>Playful, active, usually gentle, fairly hardy.</li> <li>Can become territorial with sexual maturity.</li> <li>Water parakeet (Monk) (Myiopsita monachus)</li> <li>Intelligent, feisty birds, with moderate talking ability. Hardy, including tolerance of colder environments. Colony breeders.</li> <li>Ring-necked Parrots (Psittacula sp.)</li> <li>Mustached (P: clexandri)</li> <li>Derbian (P: derbiana)</li> <li>Generally quiet, can be tame and personable. Were previously thought to be "aviary birds" until captive breeding produced tame, humanoriented individuals.</li> <li>Toucans (Ramphastos sp.)</li> <li>Keel-billed (R: sulfuratus)</li> <li>Tooc (R: foco)</li> <li>Channel-billed (R: vitellinus)</li> <li>Waterfowl</li> <li>Waterfowl</li> <li>Geese (Anser sp.) (Branta sp) (Nettapus sp.)</li> <li>Muscovy (Cairina moschata)</li> </ul>	Bourke's (N. bourkii)			OW
Senegal (P. senegalus) Myers (P. meyeri)  Quaker parakeet (Monk) (Myiopsitta monachus)  Intelligent, feisty birds, with moderate talking ability. Hardy, including tolerance of colder environments. Colony breeders.  Ring-necked Parrots (Psittacula sp.) Mustached (P. alexandri) Derbian (P. derbiana)  Can become aggressive. Tendency to become obese and a relatively high incidence of pancreatic problems. Illegal in some US states due to their propensity for establishing feral populations, even in temperate climates.  Few, except Old World species disease susceptibility. Some new color mutations may be genetically predisposed to problems.  Toucans (Ramphastos sp.) Keel-billed (R. sulfuratus) Keel-billed (R. sulfuratus) Channel-billed (R. vitellinus)  Beautiful, fascinating birds. Recognize owners, but limited interaction (may "clack," but do not mimic speech or posture as do psittacines).  Usually gentle, may be aggressive during breeding. Outdoor environment highly recommended.  Waterfowl Ceesse (Anser sp.) (Branta sp) (Nettapus sp.) Muscovy (Cairina moschata)  Intelligent, feisty birds, with moderate talking obliding to place and a relatively high incidence of pancreatic problems.  NW  Can become aggressive. Tendency to become obsee and a relatively high incidence of pancreatic problems. Illegal in some US states due to their propensity for establishing feral populations, even in temperate climates.  Few, except Old World species disease susceptibility. Some new color mutations may be genetically predisposed to problems.  Dietary requirements can be difficult to fulfill, including low iron and some live prey. Prone to iron storage disease. Voluminous, messy stool.  NW  OW  Waterfowl  Generally quiet, can be tame and personable.  Were previously thought to be "aviery birds"  billy. Some new color mutations may be genetically predisposed to problems.  Dietary requirements can be difficult to fulfill, including low iron and some live prey. Prone to iron storage disease. Voluminous, messy stool.  NW  OW  OW  OW  OW	White-headed (P. seniloides)     Bronze-winged (P. chalcopterus)		pared to Amazons. Produce a rapid "sniffing" sound when frightened that is often mistaken for	NW
(Myiopsitta monachus)ability. Hardy, including tolerance of colder environments. Colony breeders.obese and a relatively high incidence of pancreatic problems. Illegal in some US states due to their propensity for establishing feral populations, even in temperate climates.Ring-necked Parrots (Psittacula sp.)Generally quiet, can be tame and personable. Were previously thought to be "aviary birds" until captive breeding produced tame, humanoriented individuals.Few, except Old World species disease susceptibility. Some new color mutations may be genetically predisposed to problems.Toucans (Ramphastos sp.)Beautiful, fascinating birds. Recognize owners, but limited interaction (may "clack," but do not mimic speech or posture as do psittacines).Dietary requirements can be difficult to fulfill, including low iron and some live prey. Prone to iron storage disease. Voluminous, messy stool.WaterfowlGeese (Anser sp.) (Branta sp) (Nettapus sp.)Usually gentle, may be aggressive during breeding. Outdoor environment highly recommended.Require water for swimming/bathing/drinking.NW OWWaterfowlMuscovy (Cairina moschata)Outdoor environment highly recommended.Voluminous stoolsNW	Senegal (P. senegalus)	Playful, active, usually gentle, fairly hardy.	Can become territorial with sexual maturity.	OW
• Mustached (P. alexandri) • Derbian (P. derbiana)  Were previously thought to be "aviary birds" until captive breeding produced tame, human-oriented individuals.  Toucans (Ramphastos sp.) • Keel-billed (R. sulfuratus) • Toco (R. toco) • Channel-billed (R. vitellinus)  Waterfowl • Geese (Anser sp.) (Branta sp) (Nettapus sp.) • Muscovy (Cairina moschata)  Were previously thought to be "aviary birds" cally predisposed to problems.  bility. Some new color mutations may be genetically predisposed to problems.  bility. Some new color mutations may be genetically predisposed to problems.  bility. Some new color mutations may be genetically predisposed to problems.  NW  bility. Some new color mutations may be genetically predisposed to problems.  NW  bility. Some new color mutations may be genetically predisposed to problems.	Quaker parakeet (Monk) (Myiopsitta monachus)	ability. Hardy, including tolerance of colder envi-	obese and a relatively high incidence of pancre- atic problems. Illegal in some US states due to their propensity for establishing feral popula-	NW
• Keel-billed (R. sulfuratus) • Toco (R. toco) • Channel-billed (R. vitellinus)  Waterfowl • Geese (Anser sp.) (Branta sp) (Nettapus sp.) • Ducks, mallard (Anas platyrhynchos) • Muscovy (Cairina moschata)  but limited interaction (may "clack," but do not mimic speech or posture as do psittacines).  including low iron and some live prey. Prone to iron storage disease. Voluminous, messy stool.  Voluminous stools  Require water for swimming/bathing/drinking.  Voluminous stools  OW	Mustached (P. alexandri)	Were previously thought to be "aviary birds" until captive breeding produced tame, human-	bility. Some new color mutations may be geneti-	OW
<ul> <li>Geese (Anser sp.) (Branta sp) (Nettapus sp.)</li> <li>Ducks, mallard (Anas platyrhynchos)</li> <li>Muscovy (Cairina moschata)</li> <li>Voluminous stools</li> <li>OW</li> </ul>	Keel-billed (R. sulfuratus)     Toco (R. toco)	but limited interaction (may "clack," but do not	including low iron and some live prey. Prone to	NW
Waterfowl Swans (Cygnus sp.)  Beautiful, but often aggressive.  Not usually tame as adults	Geese (Anser sp.) (Branta sp) (Nettapus sp.)     Ducks, mallard (Anas platyrhynchos)			
	Waterfowl Swans (Cygnus sp.)	Beautiful, but often aggressive.	Not usually tame as adults	

Note: Since disease susceptibility (eg, circovirus and sarcocystosis), nutritional needs and/or dietary sensitives may be dependent upon the area of origin, Old World (OW) vs. New World (NW) is noted in the final species column.

organization in America, considers only canaries, finches, budgerigars, lovebirds and cockatiels suitable as pets. Larger birds are not recommended, and reasons stated against ownership include longevity, specialized needs and demands for care. <sup>10</sup>

#### The Ideal Pet Bird

While opinions vary on what constitutes the ideal pet bird, Table 2.2 lists commonly kept birds and some of their characteristics relating to pet qualities (Figs 2.5-2.45).

### Selective Breeding, Color Mutations and the Future of Companion Birds

Selective breeding has produced a variety of desirable physical and behavioral traits in many species of companion animals. Along with these desirable traits, however, come some that are less desirable or even detrimental to the health of the animal. So-called "puppy mills" in the USA in the 1960-1970s produced large numbers of dogs for the pet market without regard to the quality of animals produced. Practitioners are beginning

to recognize this phenomenon in pet birds, particularly cockatiels (Figs 2.36, 2.37), lovebirds (Fig 2.42) and budgerigars (Fig 2.45). Anecdotal reports indicate these mass-produced birds have an increased incidence of disease, unthriftiness and shorter life spans. In some cases, mass-produced birds are given prophylactic antibiotic and antifungal medications without a medical diagnosis. Pathogen resistance is a clear risk with this practice. Many bird breeders are producing new and novel color mutations of common species. Unusual varieties of cockatiels, budgerigars and lovebirds have been available for many years. Avian practitioners now are seeing unusually colored Quaker parrots and conures as well. Whether or not these mutations are less healthy than their normal counterparts remains to be determined.

An unusual color variation has been seen in African grey parrots. These birds fledge with or later develop pink or red contour feathers over various portions of the body (Fig 2.46). This coloration has been linked to circovirus or a dietary imbalance (see Chapter 4, Nutritional Considerations, Section II and Chapter 13, Integument). Many of these birds, however, do not appear to develop other clinical evidence of illness.

### Selecting Healthy Pet Birds

The average pet owner has at least a few choices with regard to selection of a pet bird. The ideal source is a breeder with limited numbers of hand-reared offspring of just a few species. For purposes of disease control, the ideal breeder does not raise larger psittacines in the same premises as smaller birds such as cockatiels, lovebirds and budgerigars. The ideal breeder selects for characteristics that maximize pet quality, such as calmness

**Table 2.3** | Summary of Characteristics of Breeders of Parrots for the Pet Trade

Ideal	Not Ideal	
Raises small numbers of birds	Raises many birds	
Specializes in a few species	Many species intermixed at same facility	
Does not mix larger parrots with small species, such as cockatiels, lovebirds and budgerigars	Larger hand-fed parrots mixed with smaller species	
Selects breeders to maximize ideal pet characteristics	Breeders selected for reasons other than to maximize ideal pet characteristics: only birds avail- able, "bargain birds," unwanted pets with problems such as phobias and feather plucking	
Sells only weaned, hand-fed parrots	Sells unweaned young birds	
Sells birds directly to clients, and not through pet stores or bird fairs	Sells birds through venues where young birds are co-mingled: pet stores and bird fairs	
Raises birds on pellets	Raises birds on seeds	

and docility and spends significant amounts of time raising and socializing young birds and feeds a formulated diet (Fig 2.47). The ideal breeder consults with an avian veterinarian and may offer birds that have been examined or even screened for underlying disease conditions. Table 2.3 summarizes the ideal characteristics of breeding facilities that produce parrots for the pet trade. In many cases, the only source of birds available locally may be those found in pet stores or bird fairs. Buyers must be aware of the potential for disease when unweaned young birds from varying sources are mixed together. Buyers should question bird vendors carefully and obtain a health guarantee. Not all health guarantees are alike and should be examined carefully. Some guarantees offer to pay veterinary bills if a health problem is discovered within a certain time period. Some merely offer to replace the ill bird with another from the same source, which often is unsatisfying to purchasers who may quickly bond to their new pet.

Increased computer access has allowed people to search for and purchase parrots over the Internet. While purchasing birds in this manner has many advantages, disadvantages include potentially shipping young birds long distances and in some cases, the inability to fully scrutinize the source.

Many commercial hatcheries produce healthy ducks, chickens, geese and other exotic fowl that can be purchased in small numbers for the pet trade. These facilities tend to follow strict disease prevention protocols, and often are much safer sources than backyard breeders or animal auctions (see Chapter 21, Preventive Medicine and Screening).

### Comments on Life with Birds

Sharing life with pet birds is not for everyone. Experienced bird owners understand that birds can produce a great deal of dust, dander and mess, require constant handling to remain tame and in many cases are long-lived. Many birds naturally tend to dunk food into water bowls and shred toys into tiny bits. Some owners can be frustrated by the demands of pet birds and endless cleaning routines. Overall, birds require more intensive training to remain social than do most dogs and cats. A well-cared-for parrot may live for many decades.

All parrots make noise, and while this fact doesn't seem to bother parrot lovers, it can bother many neighbors. It's important to find out in advance if the noise is likely to cause problems. Sometimes the quiet but constant beeping of a cockatiel may be more offensive than the



**Fig 2.5** | The human/avian bond can occur with common birds, such as pigeons (Columba livia).



**Fig 2.6** | Doves, such as this pied ringneck dove (*Streptopelia risoria*), are gentle and quiet.



**Fig 2.7** | Often overlooked as pets, some chicken breeds may be good pets for children.



**Fig 2.8** | The rose-breasted cockatoo or galah (*Eolophus roseicapillus*) is considered a pest in its native Australia, where freeranging birds are captured for the pet trade.



**Fig 2.9** | The black palm cockatoo (*Proboscigar aterrimus*) is a rare, expensive and endangered species that is uncommon in captivity and seldom seen in clinical practice.



**Fig 2.10** | These pied Bengalese (or society) finches (*Lonchura domestica*), while commonly kept as pets, are also used as foster parents to chicks of more exotic finch species.



**Fig 2.11** | The appealing cordon bleu finch (*Uraeginthus* spp.) has become expensive due to bans on wild-caught birds and aviculture challenges.



**Fig 2.12** | The yellow-collared macaw (Ara auricollis) is one of the so-called "mini" macaws that exhibits characteristics similar to larger macaws but in moderation.



**Fig 2.13** | Like most mini macaws, this severe (or chestnut-fronted) macaw (Ara severa) can be hard to find, because breeders are often few in numbers.



**Fig 2.14** | Although this white phase scarlet macaw (Ara macao) is rare and valuable, mutations like this are often less resistant to disease.



**Fig 2.15** | Green-winged macaws (Ara chloroptera) are beautiful and gregarious, but they need special homes because of their size, noise level, destructive habits and demand for attention.



**Fig 2.16** | The blue and gold macaw (Ara ararauna) is the most common macaw species kept as a pet in the United States.

ro Parque



**Fig 2.17** | The caninde (or blue-throated) macaw (Ara glaucogularis) is smaller than the blue and gold macaw and is rarely seen in captivity.



**Fig 2.19** | Despite the initial investment to purchase, it is not uncommon for the hyacinth macaw (*Anodorhynchus hyacinthinus*) to be moved from home to home due to the great demands of upkeep.



**Fig 2.21** | The white-fronted Amazon (Amazona albifrons) is one of the few sexually dimorphic parrots; red feathers are found on the wings of the mature male and not on the female.



**Fig 2.18** | The spix macaw (*Cyanopsitta spixii*) is the rarest macaw and likely no longer exists in the wild.



**Fig 2.20** | The military macaw (Ara militaris) is often confused with the Buffon's macaw, but is slightly smaller and equally rare in captivity.



Fig 2.22 | The blue-fronted Amazon (Amazona aestiva) is probably the most popular Amazon parrot because of its gregarious nature and ability to mimic, but like the larger Amazons, is frequently abandoned to a rescue facility.



**Fig 2.23** | The double yellow-headed Amazon (Amazona ochrocephala oratrix) is one of the least commonly seen Amazon parrots due to depletion in the wild and their aggressive personalities in captivity.



**Fig 2.24** |Yellow-naped Amazons (Amazona auropalliata) are successfully bred in captivity and are popular pets because they are entertaining talkers, singers and clowns.



**Fig 2.25** | Some communities have banned the Quaker (or monk) parakeet (*Myiopsitta monachus*) because escapees have established free-ranging breeding colonies even in temperate climates.



**Fig 2.26** | While the black-headed caique (*Pionites melanocephala*) is recommended as a pet, it is relatively rare and hard to find.



**Fig 2.27** | The white-bellied caique (*Pionites leucogaster*) may be threatened with extinction in the wild and should not be kept as a single pet.



Fig 2.28 | Small Australian parrots, including the superb parrot (or barraband parakeet) (Polytelis swainsonii), are usually viewed as aviary birds. However, if an individual is hand-raised in a family environment, it can be a good pet.



**Fig 2.29** A dusky-headed conure (Aratinga weddellii) is considered an ideal parrot because of its size, temperament, hardiness, lack of mutations and potential for human bonding.



Fig 2.30 | Maroon-bellied conures (Pyrrhura frontalis) are smaller and generally more acceptable as a pet than the slightly larger Aratinga species.



**Fig 2.31** | The sun conure (Aratinga solstitialis) is one of several conure species that are commonly bred in captivity, but even hand-raised individuals are loud and somewhat aggressive.



**Fig 2.32** | Blue-headed pionus parrots (*Pionus menstruus*) are noted for their calm behavior and quiet nature, but are subject to stress-related disorders.



**Fig 2.33** | Although infrequently seen in practice, pionus parrots (*Pionus* spp.) represent ideal pet characteristics: predictability, reserved nature, quiet, tidy, gentle and tolerant.



Fig 2.34 | In the USA, African grey parrots (Psittacus erithacus) are being domestically bred and managed to eliminate negative characteristics that are still prevalent in imported greys in Europe: feather-picking, screaming and respiratory infections.



**Fig 2.35** | Eclectus parrots (*Eclectus roratus*) are the most pronounced example of sexual dimorphism: the female is red and the male is green. Eclectus appear to have some unique disorders that are not yet fully understood.



Fig 2.36 | The cockatiel (Nymphicus hollandicus) is the most common patient seen by avian veterinarians. A male is shown. For best results a cockatiel should be purchased from a reputable breeder with less emphasis on developing color mutations.



Fig 2.37 | The popularity of cockatiel color mutations brings an increase in disease and unthriftiness. Lutinos (with reddish eyes) seem to have immune deficiencies and short lives, whereas pieds (such as this pied white-faced cockatiel with dark eyes) have fewer health problems.



Fig 2.38 | The meyer's parrot, a member of the Poicephalus genus, can be an enjoyable pet.



**Fig 2.39** | Because of their bright colors and clown-like antics, lories (*Loricus* and other species) in general are appealing, but their traditional nectar diets result in loose, messy droppings. This particular species, the black-capped lory, is rare and thus should not be kept as a pet.



**Fig 2.40** |The Bourke's parrot (Neophema bourkii) has all the same characteristics as other Australian small parakeets and is becoming more popular as an aviculture bird because of mutations, such as this rosy Bourke.



**Fig 2.42** [Lovebirds (Agapornis spp.) are best obtained from a reputable breeder who has not concentrated on developing mutations and has paid more attention to their long-term health. Many breeding birds have endemic circovirus.



**Fig 2.44** | Creating color mutations, such as this lutino ring-necked parakeet, result in weaker birds with more health problems.



**Fig 2.41** |Toucans can be entertaining clowns but are not generally recommended as pets because of their special dietary and large housing requirements.



**Fig 2.43** | The hardy Indian ring-necked parakeet (*Psittacula krameri*) is a common pest bird in its native India. It is dimorphic: the male has a distinct ring around the neck, whereas the female's ring is not a full collar.



**Fig 2.45** | The budgerigar (*Melopsittacus undulatus*) is the most popular pet parrot in the world. Budgerigars bred for show are often grossly overweight and have reduced life spans. The wild-type green color reflects sexual dimorphism: the cere is blue in males and brown in females.



**Fig 2.46** | Unusual red-colored feathers in African grey parrots may be linked to a dietary deficiency or circovirus infection. In many cases, however, these birds remain apparently healthy.



**Fig 2.47** | Weaning a budgerigar to a formulated diet often is easier using a mirror. Seed diets are the major cause of illness in pet birds.

occasional yell from Amazons. Canaries, pigeons, doves, finches, and even female ducks and chickens have been found in homes where neighbors never suspected they lived. In many cases, as far as neighbors are concerned, the best bird is a quiet bird.

Appropriately sized cages can take up considerable space, especially for larger birds. Large cages, play gyms and toys can be prohibitively expensive. Some owners seek to cut costs by buying used cages, which may not be safe if the previous inhabitant died of a communicable illness. Wooden perches and porous items cannot be properly disinfected and should not be reused.

Pets often are restricted for owners living in apartments or condominiums. However, one ingenious owner rescued a boisterous Moluccan cockatoo, took it to the swimming pool and put it on the fence, declaring the bird to be the condo mascot. While the condo had a nopet rule, regulations apparently did not cover mascots.

Medical care for birds tends to be less expensive than that for other domestic species. An example was heard on National Public Radio program update on veterinary costs for pets entitled, "How Much is that Doggie in the Window?" The woman interviewed had just spent over \$20,000 to treat her cat for cancer. Although many avian vets have never come close to that sum with a sick bird, the interviewee's expenditure may have been due to her inability to let go of her pet and not reflective of an expensive but successful treatment protocol.

With the above in mind, many things must be considered before acquiring a pet bird. The biggest birds do not automatically make the best companions. Most of the birds that these authors generally recommend are medium to small birds, which are easier to manage, house, feed and train than are large psittacines. While beauty is in the eye of the beholder, the finches and small parrots often are the most ornate. If song is most inspiring, only one bird has held the title of "Elvis of Birds" for so long: the humble canary. In many cases, for beauty, size and song, one has to look no further than to the tiniest birds to fulfill many desires.

So why does one choose to cohabit with a bird? It generally comes down to what seizes a person's heart. For some people, birds fill the void in a way no other pet can.

#### Conclusion

Avian companions clearly occupy more than just a niche in their caregivers' homes and lives. The importance and expertise of avian medical practice must continue to expand to meet the demands of this multi-species discipline. Bird ownership increasingly embraces large and small companions, where value often is not related to the cost of the bird. The proliferation of birds in other non-home settings, debates regarding animal rights and the wide variety of opinions generated by these issues will continue to occupy avian medical practitioners and caregivers alike.

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