



ASA

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RESTORATION AND EDUCATION

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NEXT ISSUE

GOLDEN CONURES
TONY SILVA

The purposes of the Society are the study of foreign and native birds to promote their conservation and protection; the dissemination of information on the care, breeding, and feeding of birds in captivity; the education of Society members and the public through publications, meetings, and available media; and the promotion and support of programs and institutions devoted to conservation. Front Cover: front cover: Venus, raised by George Boscoe, Blue-front amazon *Amazona aestiva*, photo Barbara Brady-Smith, www.sharethejoyphotography.com. Inside front cover: Golden Conure *Guaruba guarouba*, photo Steve Duncan. © 2012-2017 Avicultural Society of America.

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Sept/Oct 2017

President's Message

Greetings, fellow Aviculturists:

This summer, aviculturists in many parts of the US and its territories have been struck mercilessly by three of nature's strongest weapons - fire, wind and water.

Hurricanes have taken their toll on Houston, Puerto Rico and parts of Florida, leaving mass destruction and flooding. Fires in Northern California threatened Safari West in Santa Rosa, where our conference was hosted several years ago. You've probably seen the stories about owner Peter Lang, ignoring evacuation orders and putting out hot spots as they appeared by connecting 10 water hoses.

The courage and fortitude displayed by Peter is an example of aviculture in action. Fighting to keep his charges safe, risking life and limb and overcoming and beating the odds of Safari West, and its animal inhabitants, burning to the ground.

Rebuilding in all areas hit will take time, money and perseverance. I urge you to support the areas hit by visiting, if possible, donating, if you can, and by urging others to do so.

ASA has set up a donation page benefiting the Puerto Rican Parrot Project. Your donation is welcome and appreciated! <http://asabirds.org/puertoricanparrot/>

Yours truly,

Carol Stanley

President, YOUR Avicultural Society of America

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THE RACES OF AMAZON AESTIVA

Tony Silva

BLUE FRONT AMAZON (AMAZONA AESTIVA) CHACO TYPE PHOTO STEVE DUNCAN



Carolus Linnaeus (Linné) published the 10th edition of his systematic list in 1758. His *Systema Naturae* gave order to the species concept, with a generic and a subspecific name—the so-called binominal nomenclature; the tenth edition is regarded as the starting point of zoological nomenclature. This concept allowed scientists worldwide to recognize the same individual by the same name; the use of common names typically proved tremendously erring, as different countries then as they do now use different common names for the same species. This scientific principal unquestionably advanced science tremendously and is still in use today.



Linné named on page 101 of *Systema Naturae* a bird, *Psittacus aestivus*, the generic name identifying it as a parrot and the species as a bird whose color reminded him of summer; the modern *aestiva* is the feminine form of the Latin adjective *aestivus*; the generic *Psittacus* at the time contained all psittaciformes. The species was identified as originating from “America” and was named from either a depiction in a painting or a bird imported by a mariner for a pet. No type specimen was assigned and thus we will never know what formed the basis for the description.

The Latin entry on page 101 of *Systema Naturae* reads as follows:

“Habitat in America.

“*Corpus magnitudine Columbae, viride, dorso adperso pennis luteis. Facies flava. Frons caerulea. Vertex albidus. Rectrices virides apice pallidiores: 1.2.3. bafi interior rubrae; at I et am lutere exterior caerulea. Humeri fulvi s. sanguinei. Remiges primores nigrae apice caerulescentes, latere exterior virides; secundariae anteriores latere extensive versus bafin rubrae. Rostrum nigrum.*

The description has one sentence of specific interest: the Latin *Humeri fulvi s. sanguinei* translates to red shoulders with yellow. These few words are relevant to this article as discussed later.

Nearly two hundred years after Linné, the type range was assigned as “southern Brazil” by C.E. Hellmayr in his *Catalogue of the Birds of the Americas*. This is the second important point.



BLUE FRONT AMAZON (*AMAZONA AESTIVA*) BOLIVIAN CHACO PHOTO BARBARA BRADY-SMITH

The type specimen is the individual used for naming of a species and is used as the reference for all other work involving that species and its taxonomy. What Linné identified was a bird whose plumage was green, had yellow and blue in the head and red and yellow at the bend of the wing. The color of the bend of the wing has become the single identifying feature that has separated the nominate (or first named) form from the subspecies described in 1896 by Berlepsch as *Chrysotis aestiva*

xanthopteryx. (The generic *Chrysotis* was subsequently replaced by *Amazona* in J.L. Peters *Check-list of the Birds of the World*, in 1937.) Berlepsch named the bird *xanthopteryx* as a result of the presence of yellow feathers at the bend of the wing. The type for *xanthopteryx* originated from Bueyes in the Beni, Bolivia.

Subsequent ornithological work refined the distribution: nominate *aestiva* had a range centered in the north-eastern Brazilian states of



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Pará, Tocantins, Piauí, Bahia, Minas Gerais, Goiás and Mato Grosso, with some also including as part of the range São Paulo and Paraná; and *xanthopteryx* occupying the area south and west of nominate *aestiva*, extending from south-western Brazil to eastern Bolivia, through Paraguay to northern Argentina. Within this large range one would expect variability in color, especially in the extent of blue and yellow. The problem is that reality does not come

close to the postulated concept of two distinct, easily separable subspecies. Instead one finds birds with features of *xanthopteryx* within deep in the range of *aestiva* and *vice versa*, as well as a broad contact zone. There is also the issue of the description given by Linné, which clearly refers to birds from the contact zone—a fact reaffirmed by Hellmayr decades later when he assigned the range for *aestiva* as falling within the contact zone of the

two subspecies. The widely accepted red (and only red) bend at the end of the wing used to distinguish *aestiva* does not seem tenable in lieu of Linné's description.

The vernacular name has also been fraught with problem. In theory, *aestiva* should be called the Blue-fronted Amazon and *xanthopteryx* the Yellow-winged Amazon, a direct translation of *xantho* = yellow and *pteryx* = wing. Aviculturists have often struggled to identify the subspecies and typically call all birds in English Blue-fronted Amazon.

In this article I attempt to give clarity to a rather difficult subject. First let me identify the existing problems, so that they can be discussed:

Since the specimen used by Linné cannot be examined, we really have no idea of the extent of red and yellow on the bend of the wing and, especially, the morphology of the bird (as will be discussed later). Linné's description clearly rules out the form called Bahia in Europe and Auá (pronounced A-wah) in Brazil, which has a *red bend of the wing*, has a slimmer, more muscular body, exhibits sexual dimorphism (males have red bases to the throat feathers) and has an almost constant color scheme: the yellow (which forms a variable bib) is golden, the blue is pale and the plumage is a paler green. Here I refer to this form as Auá, which is the most common native Brazilian name for it; Bahia (as it is called in Europe) is a state in the north-east of Brazil and refers to only part of a broader distribution area for this distinctive form. Was the bird that Linné used (as suggested

by his description) a hybrid from the contact zone, given the description of red and yellow and the subsequent assignment of the type locality to southern Brazil?

The form called Auá has both isolated populations (i.e., Serra das Capivaras and Serra dos Confuços, Pauí) and populations that come in contact with typical *aestiva*, with which it hybridizes readily. Is the core population of Bahia sufficiently distinct to justify being separated as a distinct species or subspecies? Does molecular genetics suggest it is distinct from other forms of *aestiva*?

The contact zone between *aestiva* and *xanthopteryx* is broad and even within the northernmost range of *aestiva* one finds individuals with yellow at the end of the wing, as specimens from Belém do Pará and Aragarças, Caldas Novas, Araguacema and Nova Roma in Goiás and held in the archives of the Museu Nacional in Rio de Janeiro and the Museo de Zoologia de São Paulo and also individuals confiscated by the authorities from trappers in Bahia, Brazil show. Does this mean that this species is so variable that it is impossible to separate the forms and that a single species concept applies?

Is there constancy in appearance in specific geographic areas, or is there variability in all populations in the extent of yellow and blue on the head and also in the presence of red and yellow or both colors on the bend of the wing?

What is the occurrence of individuals of blue-faced birds that lack almost all (if not all) traces of yellow from the face and found in parts of



southern Brazil? Are they distinct from individuals from the Sierra de Santa Bárbara in the Argentine provinces of Salta and Jujuy? Do they also represent an undescribed subspecies?

Finally, how does one address the apparent incorrect nomenclature where Linné's *aestiva* describes a bird whose features approximates that of *xanthopteryx*?

My attempts to clarify the taxonomic status of *Amazona aestiva* has taken me into the archives of museums in Brazil, the US and Europe and has resulted in the examination of specimens in the field and housed as pets *in situ* across all parts of the range. I have also contacted and received the valuable opinion of Antonio Chacón in Argentina, who for over 45 years has traded in wild and captive bred individuals, and the extremely knowledgeable Brazilian aviculturist Renato Costa, who specializes in *Amazona aestiva*. My current view as expounded here is not etched in stone and is likely to change in the future, but represents data gathered over a period of 30 years.

From the early 1600s to the 1700s, Brazil's chief exports were sugar, which left from the port of Salvador in Bahia, and sugar and mining from Rio de Janeiro; Salvador was Brazil's capital until 1763, when it moved to Rio de Janeiro, whose significance by then had grown. On the shipping boats carrying sugar and the products of mining, other items left the country, including live birds. In the Archives of Indies in Seville, Spain there are shipping manifests containing the lists of the personal

items of mariners visiting the tropics and some of these lists mention live parrots as personal articles. It is thus safe to assume that the parrot used by Linné was brought to Europe by a mariner, who sold it for a pet; the bird was then either painted with its owner (as was common at the time) and thus used to describe the species or seen alive or as a skin by Linné, who documented its appearance. Whatever the source, it is not available for examination, but it is likely the bird originated from the southern part of the range or more likely the contact zone (as the bird identified in Linné's description suggests and as assigned by Hellmayr), which would have been close to the exporting port of Rio de Janeiro.

The Auá is in my opinion the most striking, separable form. It is more proportionate in shape and invariably has pale blue on the forehead followed by golden yellow, which forms a bib; its color scheme is like that found in the Cuban Amazon *Amazona leucocephala*, with the white being blue and the red in the throat being replaced by yellow. In the core range the birds are carbon copies of one another. Males typically have reddish bases to the throat feathers. The range centers on a line that extends from Goiás to Bahia, Tocantins and Piauí, possibly extending to southernmost Maranhão, where I have seen multiple caged birds.

Does this distinctness allude to the Auá being a separate species or is a separable subspecies?





BLUE FRONT AMAZON (*AMAZONA AESTIVA*) TRUE AESTIVA TYPE-- NOTE LITTLE COLOR AND ONLY RED AT BEND OF WING PHOTO TONY SILVA

Based on current taxonomic principals, for Auá to be regarded as a valid and distinct species from *aestiva*, it would have to come in contact with *aestiva* and not hybridize. As an example, *Amazona ochrocephala* and *Amazona farinosa* come in contact within parts of their range but they are clearly separate species because they do not hybridize. Subspecies, however, are allowed to cross when they come in contact with each other.

For years I thought that Auá did not hybridize with the typical *aestiva* but I have seen individuals in the wild at the *periphery* of the range where they come in contact with *aestiva* that did not have the defined yellow bib; indeed the birds clearly displayed features that

suggested a cross between Auá and *aestiva*. Data from molecular genetics studies suggests that the true Auá are genetically different. This form also seems to nest terrestrially in termitaria, though much more research needs to be conducted. This concept of ground nesting may seem ludicrous, but the same skepticism surfaced when in *Psittaculture* (1991) I indicated that *Alipiopsitta xanthops* bred in terrestrial termitaria and was not an Amazon parrot; it was at the time known as *Amazona xanthops*. Now it is widely accepted that *xanthops* commonly nests terrestrially and that it is a member of a separate genus (*Alipiopsitta*).

My hypothesis is that the Auá is a distinctive form that will eventually

be classified as a subspecies. That it hybridizes with *aestiva* is as pointed out acceptable at a subspecies level.

The contact zone between *aestiva* and *xanthopteryx* is very broad. Throughout much of central and southern Mato Grosso and Paraná, Brazil, the two forms integrate freely; some populations also appear to hybridize with *Amazona ochrocephala* and this will eventually result in a restructuring of the species we currently regard as distinct or allied. Birds from these zones, even from the same clutch, can display predominately red or an equal distribution of red and yellow from the bend of the wing. The intergradation is acceptable at a subspecies level and thus does not impugn the validity of a subspecies.

Within Brazil, one finds tremendous variability in the amount of yellow and blue on the head, but there is constancy if one examines a large enough series of birds. In general terms, birds from Brazil north of southern Mato Grosso, Mato Grosso do Sul and São Paulo have limited amounts of yellow on the head; it rarely extends beyond the ear coverts and typically extends just past the rear part of the periophthalmic ring. The blue is restricted to the forehead and forecrown. South of these three states, one finds birds with much more color. I have found individuals at Bonito in Mato Grosso do Sul, Poconé in Mato Grosso and Itapetininga in São Paulo that had yellow extend beyond the ear coverts to the latter part of the crown and throat. These individuals occurred in populations of less colorful individuals.

Brazilian specimens from the north-east are larger and longer than those from Mato Grosso and São Paulo but smaller than *xanthopteryx* from the Chaco.

Individuals from Bolivia, Paraguay and Argentina also show tremendous color and size variation. Birds from eastern Paraguay and most of Formosa province in adjacent Argentina tend to be smaller and duller compared to those from the Chaco region, which are more colorful (sporting more yellow on the head and the bend of the wings), are larger, possess a longer tail, have hints of yellow to the thighs and have lighter green underparts, often bluish hinted. Individuals slightly smaller than those from the Chaco and possessing less yellow to the head, more blue on the head, more red to the bend of the wing and a darker green underside occur in western and north-western Salta and Jujuy in Argentina, central Paraguay and central Bolivia. Individuals with an equal amount of yellow and blue to the head, the blue being lighter, and about the same amount of red and yellow to the wing occur in Santiago del Estero and Tucumán in Argentina. In size they resemble Chacoan birds.

The Chacoan form appears to nest at a different time than the other types. As an example, within the Argentina range, which extends from Juan José Castelli in Chaco Province to the city of Joaquín V. Gonzalez in Salta and south to Santiago del Estero, the young fledge up to a month *after* the other types.

Individuals with significant blue in the face (the yellow being restricted



AMAZONA AESTIVA SIERRA DE SANTA BÁRBARA TYPE WITH ONLY BLUE HEAD AND NO COLOR TO BEND OF WING. PHOTO TONY SILVA

to the periophthalmic region) occur in all populations, but in Brazil appear to be concentrated to the southern states of São Paulo, Rio de Janeiro, Paraná and Rio Grande do Sul. Some of these populations are likely introduced. These birds possess both red and yellow in the wings.

The Brazilian blue-headed birds differ significantly from the individuals found in the Sierra de Santa Bárbara in the Argentine states of Salta and Jujuy. These individuals display an opaque green color, completely green bend of the wing and green heads with sometimes a blue wash but no yellow. They are small in size and are slim in build. In many ways they resemble an *Amazona mercenaria*. This population seems isolated and thus would appear to

be genetically distinct. Attempts to study it have not been carried out. Aviculturally speaking this form may be novel but its dull coloration would not make it coveted.

The bird currently called *Pyrrhura perlata perlata* was once called *Pyrrhura rhodogaster*, until evidence surfaced that in fact the skins used to name the red bellied form were in fact *perlata*, the Pearly Conure, another species. I believe that the same has occurred with *Amazona aestiva*: the form named by Linné was in fact the form subsequently identified by Berlepsch as *xanthopteryx*, leaving the red wing form without a name and making Berlepsch's *xanthopteryx* invalid. This leaves open this species to name changes.

To summarize my perception of the races of *Amazona aestiva* requires that a principal from herpetology or the aquarium hobby to be borrowed: geographic variants. Snake breeders often refer to a form by its geographic distribution. The form of the Corn Snake *Pantherophis guttatus* from the Okeetee Hunt Club in Florida, for example, is called the Okeetee Corn Snake and the African cichlid *Tropheus duboisi* from the Kigoma side of Lake Tanganyika is called *Tropheus duboisi* "Kigoma" to differentiate it from other color forms of the species from other parts of the lake. I believe that our increasing knowledge of parrots in the field justifies borrowing this concept. It allows certain distinct,

localized forms to be identified, even though they have not been formally described as a valid subspecies. This is already the case with the form Auá referred to in Europe as 'Bahia'. For the short term this is acceptable, though in this case I believe that this form should be named as a subspecies. I favor the use of Auá over 'Bahia' in the vernacular simply because this form is not isolated to a small area but rather a swatch that stretches across at least four Brazilian states.

The Chacoan bird also deserves to be identified as different by scientific name. It not only has a distinct appearance but nests after the typical, less colorful form.

AMAZONA AESTIVA CHACO TYPE PHOTO TONY SILVA





SALTA TYPE PHOTO TONY SILVA

The nomenclature also needs to be reviewed, as the name *aestiva* clearly references the form subsequently described by Berlepsch.

The new nomenclature would require that the red winged, Sierra de Santa Bárbara, Auá and Chacoan forms be named, with the elimination of the apparently invalid (because of duplication) *xanthopteryx*.

Finally, because one deals with so much color variation in *Amazona aestiva*, I favor pairing like birds. This insures that at least localized forms be kept similar through generations of breeding. With this parrot this is difficult but it is not impossible. Special attempt, in particular, needs to be given to Auá to insure that breeding with birds from a contact zone does not occur. Maintaining form purity is important for this very attractive form.

Now to aviculture. As aviary birds, *Amazona aestiva* is the most commonly bred member of the genus, being established worldwide. It is also one of the few Amazons that is reared in commercial numbers for the pet trade; their "talking" ability is recognized worldwide and creates a demand that seems to invariably exceed production. Their willingness to nest, propensity for producing viable eggs (infertility is probably the most common problem I hear about in this genus) and reliability as a breeder contributes to the success.

I have bred five generations of this species and have visited some of the larger breeding facilities worldwide. Marcia Weinzettl has shown me several collections in Brazil where this parrot is reared in commercial numbers. The combined information does provide a manual for success:

Pairs should be flighted in same sex groups outside the breeding season or the pairs can be left in their cage but any visual barrier removed, to allow the males to see each other through the start of the breeding season. The introduction of a pair into a breeding cage or the ability to display to males in an adjacent enclosure has a stimulating effect.

At the onset of breeding season, a visual barrier should be erected to prevent males from agitating each other to the point where they may aggress their mates.

The diet should be enriched at the approach of the breeding season. We feed our *aestiva* pellets as the sole diet for 8 weeks prior to the onset of the breeding season, when the diet is supplemented with considerable fruits (mainly papaya, guava, mango and other tropical fruits—I limit the feeding of cultivated fruits which have been produced for the human palette and contain an inordinately high amount of sugar), vegetables (principally steamed carrots, sweet potatoes and pumpkin, which are high in beta-carotene, but also cooked broccoli, thawed corn, peas and lima beans, and *Moringa* leaves), sprouted seeds and pulses (various types of peas, mung beans, lentils, small sunflower, safflower and more) and a cooked mixture that is based on whole grain pasta. The intention is to enrich the food and bring about reproduction. After breeding, we eliminate the sprouted seeds but feed fruits, vegetables and pasta mix until eight weeks prior to breeding, when they receive the austere diet. The abrupt change from a dry to

a primarily wet diet seems key in inducing breeding.

Being seasonal nesters, Amazons produce a single clutch if they are allowed to incubate their eggs and rear their young to full term. Experimentation over many years—the intention was to apply the findings to endangered species requiring high numbers of young to be produced relatively quickly—has shown that it is possible to maximize production. This is achieved by removing the first three eggs as they are laid. They are incubated artificially. The hen is then allowed to continue to lay and incubate the next eggs, or the completion of the clutch, for less than 15 days; in *aestiva* the ideal time is 12 days. In most pairs there is only a slight hiatus between the laying of the first three and the remaining three or four eggs in the clutch. These eggs are removed for artificial incubation after the oldest is 12 days old. Most hens will then produce a third clutch. This clutch can start from 21-33 days after the eggs are removed. These eggs should be left under the pair, which will generally rear them through fledging; Amazons tend to be in my opinion reliable parents. If eggs are removed as they are laid, the number produced is never as high as when the above technique is applied.

In *aestiva* the incubation period is 26-28 days. I have found that the descendants of birds that I personally collected many decades ago in the area around Tres Isletas in the Argentina Chaco have an incubation period that is 27-28 days while individuals from Formosa, also in



Steve's Photo Pick

Trumpeter Hornbill, *Bycanistes buccinator*, (6-week-old chick) – A common species of equatorial Africa, the Trumpeter Hornbill often lives in small groups but sometimes as many as 50. Trumpeters are a medium-sized hornbill at about 24" long and do have a loud braying call, much louder than the *Tockus* species of hornbills which are also from Africa. Trumpeter Hornbills are omnivorous but eat much more fruit than animal prey, which is mostly insects. Like most other hornbills, the female will seal herself into a tree cavity for the duration of incubation and most of the period that the chicks are being reared. Young hornbills often sit with their tails cocked up, an adaptation to living in the close quarters of a tree cavity.

Steve Duncan

Avian Resources






BLUE FRONT AMAZON (*AMAZONIA AESTIVA*) BOLIVIAN CHACO PHOTO BARBARA BRADY-SMITH WWW.SHARETHEJOYPHOTOGRAPHY.COM "VENUS" IS OWNED BY GEORGE BOSCOE

Argentina, consistently hatched at 26 days. The young are easily hand-reared. Sexual maturity is reached by 3 years of age. Rearing the young in groups and allowing natural pairing seem to contribute positively towards early breeding. Force pairing can have a delaying factor.

The Blue-front in all its forms is a stunning and esteemed species as a pet and aviary bird that justifies its

cherishes position in aviculture worldwide. They have always attracted a special interest and have been the focus of extensive field research on my part. They have and will always hold a special place in my collection. So if they become available, do not pass this gem up, as they will surely soon capture a special place in your home or aviary. 

Who's Your Daddy?



PHOTO STEVE DUNCAN

Stumped?

See answer on page 34

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PHOTO OF CHICKEN COOP IN SUSIE'S CHILDHOOD BACK YARD. SUSIE IS THE INDIAN PRINCESS BEYOND THE POLE O THE LEFT. PHOTO BY J.S.RICHTER OF FRESNO

Back Yard Chickens: Pros and Cons

Susie Christian, Morro Bay, CA and Sue Christian Garza, San Antonio, TX

The earliest memories of my childhood in Fresno, CA, were of doing the chores for the hen house. I was in charge of raking the poop and removing it from the pens, to be used for my mom's flowers. I also mowed our lawns and carted the clippings to the hen house, because my mom swore it made the egg yolks bright orange. I fed the hens laying pellets and collected the eggs several times a day. Crazy child that I was, I'd lift the back of the nest boxes open, just to watch the old girls lay their egg. I had no computer for real entertainment in 1950.

My parents were fairly logical, and instead of buying a couple of air-brushed pink and blue chicks at the feed store during the Easter season, my dad went out and bought two dozen straight run baby chicks. They had to be White Leghorns because my mom hated eggs, using them only in her cooking. To her, brown

eggs were yucky, where white eggs were border-line acceptable, and White Leghorns lay white eggs. My dad built a super-mansion for the chickens, a double space area chicken coop, so the older hens or the ones that got picked on could be separated for a more peaceful existence. I remember my dad "taking care" of the budding roosters with a hatchet, so my mom could put them in the pot. Just a part of growing up on a ranch, along with not getting or expecting a \$\$ allowance. I learned a lot about life from caring for the chickens and have managed to keep at least a few hens for 7/8ths of my life. My daughter, Sue, and I started incubating poultry eggs when she was in grade school. We had an ancient Turn-X incubator and we hatched chicken, Valley quail, Coturnix quail, Bobwhite, Button quail and pheasant eggs, for many

years. Sue remembered those days and about four years ago she purchased a Brinsea incubator for my granddaughter, Ayla, as a Christmas gift. They began by hatching turkey eggs and still have the incubator running and filled with many different breeds of chicken eggs. Their flock size in San Antonio is right around thirty chickens. My daughter helped me with this article and while I may be the "eclectus expert", I know she has not only caught up with me in chicken know-how but zoomed way beyond me in knowledge and experience. Delighted to see the apple didn't fall far from the tree! Lately, more of the urban population seems to be very much into back yard chicken-keeping. My next door neighbor has eight hens, I have three hens and many friends in town keep half a dozen or so as pets

and for eggs. However, the hens have given me a few headaches over the years. Sometimes code enforcement officers will get badge heavy and become hard to deal with. Years ago, an officer came out and talked to me about keeping poultry and we ended up becoming friends. I made sure she got a dozen eggs every few weeks when I visited her at City Hall with my bribe for looking the other way. Warning - this probably won't work in most cases!

Neighbors never seem to mind the hens and actually like the noises the hens make. I am careful not to add any roosters. I have also made it a practice to share eggs with the neighbors – even if it's just a half dozen.

As soon as the new incubator came, Sue Christian Garza hatched chickens and three Wild turkeys, one of which is pictured here. She hasn't stopped the incubator for very long either, even hatching eggs for her friends.





My grand daughter, Ayla Garza, has been incubating, raising and tending to their flock of thirty chickens since she was eight years old. She and her mother, Sue Christian Garza, hatched all of these chickens, who are pets first and egg producers second.

Pros

Fresh Eggs

If you and your family enjoy chicken eggs, then freshly laid eggs will delight your palette. They are richer in color and taste; you know they are fresh and know the chickens are cared for and know their diet is healthy and therefore the eggs are healthy. And that is not to mention



Lily keeps her hens in a large metal shed at night time and also has their nest boxes in the shed. They get free roam of her nicely fenced yard, by day. Her profession by night is tending bar and by day she is a foxy chicken-keeper.



Lily Hernandez ended up with five hens when her then-boyfriend went out and bought the chicks, mainly for himself. But when they parted, it was Lily who insisted on retaining custody of her girls. Her favorite girl just gave her a chicken-kiss here.

My neighbor, Susan Lee Johnson, who was in the law enforcement business before she retired, lives next door to me and keeps eight hens. She lived on a ranch in the San Joaquin Valley for many years and used to have at least forty hens and roosters until she moved to town and had to downsize.



Susan keeps her hens in a very sturdy chain link pen and they are allowed out for a portion of the day, to scratch and take dirt baths. It has been interesting to see all the different ideas on pen construction.

Some folks use shavings for nest material and some use straw. Just a matter of individual preference. But the dog kennel with the nest inside is a good idea and can accommodate two hens who happen to get the urge to lay simultaneously.



the fun and reward of gathering your daily prizes!

Low-Maintenance

Chickens require little maintenance. Feeding, watering, and regular

coop upkeep makes them easy to care for, compared to other family pets. However, it is important to cage them in such a way that they are protected from predators like raccoons or stray dogs.



Nicely designed and constructed nest boxes.



A unique idea for a ladder. Glued on, so the toenails won't get caught on it.



Charles built his own chicken pen, using mostly what he had and implemented the recycled materials well. Nice use of paving stones to make sure the cage is varmint proof.

Inexpensive Upkeep

Day-to-day chicken expenses are minimal. For three chickens, you can expect to pay about ten dollars a month for food and miscellaneous expenses. I pay nothing in food expense because I feed my hens the left-over parrot food, which consists of sprouted grains and cooked mash with chopped vegetables in the mix. Whatever fussy parrots leave behind, goes to the chickens. Oyster shell for calcium is recommended in the daily diet because it helps with the development of the egg shells. There are a couple of options to get calcium in the diet. Buy feed with calcium already in it, or add oyster

shell mix to the feed. If recycling is more appealing, dry the empty egg shells, crunch them up and feed them back to the hens. Sue does this for her chickens.

Lush Lawn and Garden

Chicken poop is a natural lawn and garden fertilizer. It will do wonders to revive your grass and garden. If you have chickens in your backyard, you can expect to have plenty of free fertilizer. Chickens scratch and dig the soil to forage for seeds and bugs. During this process, mulch and compost are spread out, soil layers mixed and the ground loosened. Most importantly, oxygen is added to the soil and particle size is reduced. Chickens scratching in the dirt aerate your soil as well. Sue's chickens are great little helpers and



Charles Cole has been retired for years and just bought eight baby chicks, two years ago. He never had chickens before and they are his whole life now.

they love to get involved in your yard work, eagerly awaiting what is uncovered to see anything they may have missed.

Pest Control

If you let your chickens roam free in your yard, they will entirely eliminate bugs, snails, weeds and flowers as well. Chickens love a lot of the things that gardeners do not – like weeds and insects. They forage for seeds and bugs and clean up fallen fruit and green leaves. You'll never have to use snail bait or weed killer again!

Chickens make Great Pets

While chickens aren't exactly like dogs, chickens do have some great personalities. If you raise and handle them from a young age, they'll follow you around and let you pet and hold them. Every hen I have had was very different from the next one. I'd say do some research to figure out the

best breed for you. There is a lot of information on line describing the various features of chickens and their personality traits and egg laying capabilities. These days I pick my hens for their egg laying ability. Typically, hens will start laying as early as 6-7 months of age. Years ago, I kept Polish, Silkies and Buff Cochin hens but they weren't as good in the laying category. Silkies, in particular, tend to set more and lay less.

Getting Started

Once you have done your research on the breeds best for you and done the chicken math (how many do you want), it is time to purchase them! If hens are your only option, some chicken breeds can be sexed at birth and purchased as labeled "pullets". It does limit your selection or desired breed, but you won't have to part with any unwanted roosters down the line.



Especially impressive is the sliding door.

Cons

Expensive Initial Costs

Getting started can be a bit pricey. The chickens have to be purchased, if they are small chicks they must be fed starter mash and they will need to be kept warm. So heating supplies are to be bought, (and will be needed until they about three months old). When they are off heat, they will need a chicken coop, which can cost from 200.00 to 500.00 or more. Depending on the number of chickens, the coop is the most expensive cost. If you are handy enough to build your own and have access to the materials, this will greatly reduce the cost. Also using recycled materials helps, such as scrap wood, pallets, outgrown trampolines, play houses, etc... Get creative and cut costs!

Ordinances for Your Area

The rules surrounding what is and isn't allowed in terms of backyard chickens can vary from city to city. You must first make sure your backyard chicken endeavor abides by the ordinance in your specific area. Local city and county animal and zoning ordinances found online usually state whether it is legal to have chickens in your town. If not you can contact your local City Hall. I don't think we have a law that says it is OK to keep chickens in my town but so many people have them, it seems that the powers that be all look the other way. I can't stress enough though how important it is to know the law first.

Unhappy Neighbors

Those living next door to you might not be as excited about your new pets as you are, but you can improve the relationship by keeping coop and pens clean and being generous with your fresh eggs. If you are close to neighbors, unkempt coops will attract flies and smell that will likely cause a neighbor to make a complaint to authorities.

Breed Incompatibility

Each chicken breed has its own personality, from the strong egg-layers to the more brooding types. If you choose a breed that doesn't match with your needs and lifestyle, you could run into trouble. Take the time to research on line or ask at your feed store. I have received a lot of great suggestions and help from feed store employees regarding all aspects of poultry keeping.

Coop Upkeep

While chickens are relatively low-maintenance, they're not zero-maintenance. Their coop must be kept clean, dry, and well ventilated, and they need a steady supply of fresh food and water available to them. It is very important to keep the coop clean and drinking water clean and fresh. Dirty water can cause bacteria growth, resulting in deadly illnesses for the chickens. If you travel a lot, work irregular hours or are squeamish about picking up poop, then chickens probably are not for you.

Destructive Tendencies

Left to roam unsupervised, chickens can do some real yard damage and it

will be bye-bye pretty landscaping. Not to mention the craters and hills they can create for dust bathing. Chickens will destroy many garden plants because they don't know a weed from a flower. Their scratching may aerate the soil but it also throws dirt everywhere you don't want it. Chicken yard renovations can be dangerous and cause trips and falls as well as be unsightly.

Natural Predators

Chickens have many natural predators: skunks, possum, raccoons, cats, snakes, coyotes and domestic dogs. Even when taking precautions, like getting chickens into their coop before dark and making their coop as break-in-proof as possible, it's likely that you're apt to lose chickens to predators at some point.

Free-range Chickens


Consistency is important for chickens allowed to free-range in the yard. Training birds to know specific cues will help them return to the coop at night. One starter exercise would be training chickens to come back to the coop when called. Start with small periods of supervised time in the garden and work up to longer periods. Maintain a routine with how and when you let the chickens free-range. Eventually, at dusk, instinct will tell them it is time to go into the coop for night-night.

If there are certain areas you'd like to keep free of manure or if certain plants should be off-limits, add a fence or chicken wire barrier. Some breeds of chickens are great fliers, so be sure that any fence erected is tall

enough for them not to be able to fly over. Or keep Silkies – they can't fly. Additional tips to protect young plants include: rotating chickens through different areas of the yard, placing stones around plant bases or creating tepee-like structures over young plants.

Final Food For Thought

A few more thoughts before you run out and pick up, hopefully, pre-sexed chicks - what do you do with the roosters? If you are squeamish about putting them into the pot, a good idea is to find someone to take them off your hands. Possibilities would be to place an ad in the classifieds, network with local chicken groups or social media. Most people like the thought of producing their own eggs, but the laying life of a hen is typically done by 2 to 3 years. That's when they were historically turned into chicken soup. People today want laying hens but want to find a home for them when they stop laying, so they can be replaced with more laying hens. Again, you can check with your local feed store classifieds or social media to locate someone who will take the roosters or hens who have out lived their egg-laying days. Unless of course you have grown fond of them and don't mind keeping those older, non-productive hens around until they die a natural death.

A good idea to plan the chicken experience from beginning to end by researching, asking a lot of questions and not rushing into it by buying baby chicks before you have the hen house built! 



Pick Your Color

Carol Stanley

Whilst collecting dishes from my softbills, I will usually encounter certain colors of the pellets uneaten.

I have also seen this in parrots. In a mix with red, orange, yellow and green, the red is almost always the first eaten. The remaining colors are selected by preference for eating by color until, the least favorite is left in the dish. If the dish is not refreshed, the birds will start eating the perceived inferior pellets - for the most part.

It seems my Blue-naped mousebirds (*Urocolius macrourus*), are stubborn little creatures that draw a line in the dish and don't cross it. After tasting each color individually myself, I detected no variance in texture, flavor or crunchiness. What causes a bird's preference to be established in the first place?

This piqued my curiosity and I did a little "Googling" to find a study done in China on bird food color preferences. The study was

Table S1-2. Natural fruit colour preference by individuals of hand-raised *Pycnonotus jocosus*, *P. aurigaster*, and *Megalaima asiatica*

Species	Color	Individual											
		1	2	3	4	5	6	7	8	9	10	11	12
<i>P. jocosus</i>	black	√		√	√	√	√	√	√	√	√		√
	red	√	√		√			√					√
	yellow												
	green												
	blue												
<i>P. aurigaster</i>	black	√	√	√	√	√	√	√	√	√	√		
	red												
	yellow												
	green												
	blue												
<i>M. asiatica</i>	black	√		√	√	√		√	√	√			
	red		√		√	√	√						
	yellow												
	green												
	blue												

√: preferred at $P < 0.01$ level (ANOVA followed by multiple Bonferroni-corrected two sample T-tests). Each individuals repeat 9 times.


conducted and written by Qiong Duan, Eben Goodale & Rui-chang Quan, and I pulled the chart above from the study and noticed that black and red colored fruits were the preferred colors of the three hand-fed species tested.

The extensive study further explains the prevalence of these color foods and their availability. Birds search for food by color and black and red seem to offer them the most food in the wild.

I recommend looking the study over for yourself. There is much more than can be discussed here and it is an interesting subject for those whose curiosity is piqued, as mine.

The study resides at the following link: <https://www.nature.com/articles/srep05627>

As for me, I've since switched back to a non-colored pellet which happens to be a brownish yellow. You ask "Do they eat it?" and the answer is "yes". Otherwise I would be writing about how my Blue-naped mousebirds died due to not getting the correctly colored pellet.

UPDATE: Greater Indian Hill Mynahs (*Gracula religiosa*) do not concur. Orange was favorite followed by green and yellow. Red was uneaten at the bottom of the bowl. 



LILAC-CROWNED AMAZON (AMAZONA FINSCHI) PHOTO STEVE DUNCAN

Who's Your Daddy?

From page 31, Answer: Lilac crowned amazon (*Amazona finschi*)

The lilac-crowned amazon (*Amazona finschi*) is a parrot endemic to the Pacific slopes of Mexico. Also known as Finsch's amazon, the parrot is characterized by green plumage, a maroon forehead, and violet-blue crown.

The binomial of this bird commemorates the German naturalist and explorer Otto Finsch.


In 2006, BirdLife International classified this species as vulnerable. In 2014, IUCN uplisted this species to Endangered.

FERAL BIRDS

There are feral populations of this bird in several counties in southern

California. It has been observed in residential and suburban areas, but also in native coniferous forest in the San Gabriel Mountains, California, United States.[2] Some have also been spotted in southern Texas, likely to be escapees.

AVICULTURE

Hand reared lilac-crowned amazons can be quite friendly in captivity and can learn quite a vocabulary, even though they are not known as talkers. They make good companion parrots. 

From Wikipedia, the free encyclopedia

EVENTS

2018 EVENTS



AMERICAN FEDERATION OF AVICULTURE - AFA's 44th annual Educational Conference and Avian Expo will be held in **San Antonio, TX, August 16-18, 2018**. More info on www.afabirds.org



AVICULTURAL SOCIETY OF AMERICA - ASA's 13th Annual Education Conference in Fall of 2018 will be announced soon. Watch for more details online at www.asabirds.org

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Contra Costa Avian Society
P.O. Box 23115 Pleasant Hill, CA 94523
www.contracostaaviansociety.org

Orange County Bird Breeders
www.ocbirdbreeders.org

Acadiana Bird Club
480 Almonaster Dr Youngsville, LA 70592
acadianabirdinc@hotmail.com

Fort Worth Bird Club
P.O. Box 1712 Keller, TX 76244
fwbc@fortworthbirdclub.com

Arizona Seedcracker Society Inc
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