Exotic Pheasants

Captive Management and Propagation

by Mickey Olsson

Pheasants are one of the most popular and colorful of all display birds. For centuries their exotic appearance, along with relative ease of captive management, have made them common in most avicultural and zoological collections.

No other group of birds has made such an impact on the social and economical history of mankind, since domestic poultry are descendants of the junglefowl, themselves members of the pheasant family. Game Pheasants have been hunted for centuries both in their native distribution and as transplanted sport bird for western man. Few zoo visitors fail to have at least a limited knowledge of what a pheasant is, as they have affected the lives of most people, serving as food source, sport or as display birds in parks and gardens.

There are 16 genera comprising 48 recognized species of Pheasants. In some species there are numerous subspecies or races bringing the number of forms to about 150.

All of the pheasants, including peafowl and junglefowl, are found in Asia except the Congo Peacock of Africa.

During the past 50 years radical changes have taken place in much of Asia which have severely decimated wild populations of many species of pheasants. Human over-population, deforestations, military conflict, coupled with the fact that pheasants are considered good eating and are very colorful, account for the reduction in numbers of wild population.

Political upheaval, over-population and poverty in many Asian countries make protection of rare species in the natural population almost impossible. Therefore, it is most important to maintain a viable, productive population in captivity of these disappearing forms.

Fortunately, most species can be propagated successfully in zoos and private collections if a few essential considerations are given priority. These include:

1. Suitable climatic conditions for the species.
2. Proper, adequate environment.
3. Adequate nutritious diet.

I would like to discuss some of the more exotic, rare pheasants, their history, captive management and propagation methods.

Most of the species listed as endangered or threatened are receiving attention in captivity and success is being attained with many of these.

The Edward’s Pheasant is a small and beautiful bird first discovered in 1895 with a small distribution in central Vietnam near Hue (Way). It was first imported in 1925 to France by Dr. Delacour, when he brought some 15 individuals to his collection. It was successfully propagated and distributed to zoos and aviculturists in Europe and America. But recently it has become increasingly difficult to breed and abnormalities in plumage are appearing. Since these birds are likely extinct in the natural distribution, the World Pheasant Association has recently started a Stud Book under the direction of Dr. Tim Lovel to attempt to random pair birds as much as possible. To date, 240 birds in 93 collections have been identified and I urge any collections with Edward’s to participate in this Stud Book project.

Swinhoe Pheasants, a closely related species to Edward’s is a success story for captive propagation. An inhabitant of the interior of Taiwan, it was extremely rare in its’ native range. First imported to Europe in the 1860’s it has bred in captivity extremely well and was one of the most commonly kept pheasants until the Endangered Species Act of 1973 discouraged its captive propagation. In 1967, 30 captive raised Swinhoe’s were sent to Taiwan to be re-introduced into their natural habitat in a forest area controlled by the Taiwan National University. More have been sent since the Taiwanese government has also propagated some in captivity to be released and these birds are once again becoming well established.

Also closely related is the Salvadoris Pheasant of the interior of South Sumatra. Three were imported into France in 1939 only to be destroyed by the Second World War before propagating. In 1976, they were successfully propagated in Europe, a first captive breeding, and in 1977 were reared in New York in Mr. Charles Sevilles’ collection.

Fireback Pheasants also are inhabitants of the low lying jungle areas of South East Asia. The most common is the Siamese Fireback which is well established in captivity in both Europe and America.

The Malayan Crested and Bornean Crested Firebacks are beautiful birds which have become well established in the past few years in American aviculture.

The Crested Fireback Pheasants have been imported several times but seem to be more delicate and have never propagated well. There are very few in captivity today.

The Wattled Pheasant from the interior of Borneo has recently been propagated in Mexico for the first time. It is hoped they will become more available as they are very striking birds which need to be established in captivity.

All firebacks make excellent display birds as they are usually tame and in warm climates, quite hardy. In cold areas artificial heat is necessary.

The Argus Pheasants are junglebirds found on the Malay Peninsula, Sumatra and Borneo. They have always been prized in collections because of their interesting display and beautiful long secondary feathers which grow four feet long on adult males.

They lay only 2 eggs per clutch so large numbers are not reared and these birds have always been rare in captive collections.

The Palawan Peacock Pheasant is another warm climate bird which has been decimated on the Island of Palawan by forest destructions. It has always been scarce in its range and very localized. Since the 1930’s there have been several importations and at present we have a fairly strong breeding stock in many collections. However, as with all members of the peacock pheasant tribe, the clutch size is only 2 eggs, so large numbers are not reared.

The Hume’s Bartailed Pheasants were first imported in the early 1960’s from their native Southeast Asia. Humes have extremely local distribution and are nowhere abundant. They have proven to be very easy to propagate in captivity and were well on their way to becoming common in captive collections before the 1973 passage of the Endangered Species Act. I received one of the first pairs imported into the U.S. in 1966 and in one year 22 were successfully reared with no major difficulties.

The Mikado Pheasant inhabits the indigogenous forests of the temperate zones of Taiwan. The Mikado has been declining during the last 25 years in Taiwan, however, it is being raised in some number in captivity. It prefers a colder climate than many pheasants and does not do well in warm climates.

The Eared Pheasants and Tragopans are birds of the higher elevations of Asia. They are not well suited to warm climates and when temperatures exceed 100 degrees losses are to be expected. Tragopans are much more arboreal than other pheasants. They lay few eggs, clutches consist
of from 3 to 6 eggs.

There are 3 distinct colors of Eared Pheasants. The Blue Eared is well established in captivity and are believed in no danger of extinction in their native western and central China. Both the Brown Eared and White Eared are rare in captivity as well as in China. It is believe all Brown Eared Pheasants in captivity today are descendants of 1.2 imported to Paris in 1864. These surely must be considered a self-sustaining captive population. Despite this small original gene pool there are several aviculturists producing strong, viable chicks in captivity today. The White Eared Pheasants consist of 4 or 5 various races differentiated by the degree of dark coloration. They are the least numerous of the Eared Pheasants although some have been propagated successfully in several collections the past few years.

The Koklass Pheasant of the Himalayan Range have received much attention in the past 15 years and have proven to be good avicultural subjects. Prior to 1960 it had the reputation of a very delicate species to propagate and maintain. However, in recent years we have learned that Koklass require abundant green food to supplement the regular pheasant diet. Also it is prone to feather picking and needs more space than most pheasants. Recently, several aviculturists in the U.S. and in Europe have been successfully propagating Koklass using this new information. The Pheasant Trust in England has produced these in some numbers for several years.

In propagating exotic Pheasants I have perfected some techniques which are successful for my particular situation. These same methods are used in some private aviaries and a few zoos. However, I would like to remind you that these methods are not solid rules and can and should be adjusted for each individual situation.

In housing Pheasants, I feel it is most important to give the birds as much room as possible. For some of the smaller species, such as the peacock pheasants aviaries should range in size from 125 to 300 sq. ft., per pair. For larger species the aviary size should increase correspondingly. Some of the grazing pheasants such as Tragopans, Eared or Koklass need as much as 700 to 800 sq. ft. per bird to adequately provide for their needs as they enjoy and need room to graze and dig in the soil.

Minimum height for pheasant aviaries should be 8', more desirable is a height of 10' to 14' as the birds can perch above any danger which they feel threatens them. A bird two feet above danger is more secure than a bird 6 feet horizontally removed from its danger.

My aviaries, and most successful pheasant aviaries, are well planted. Each fall the aviaries are planted with grass and all soil is completely tilled to a depth of 6". A seed mixture of 1/5 Rye grass, 1/5 Oats and 1/5 Barley is planted. This remains green until late spring and provide forage, cover and attracts insects as well. Trees used include fruit trees such as Apricot, Plum, Quince, Peach and shade trees such as Mulberry, California Pepper, Monk's Pepper and Mimosa. Aviculturists in colder climates propagating forest pheasants use various fir and pine trees in and around their aviaries for natural settings.

Many pheasants are polygamous and several hens can safely be kept in the breeding pen with one male. However, in seven of the 16 genera of pheasants this is not the case. Those which are monogamous include the Tragopans, Blood Pheasants, Peacock Pheasants, Eared Pheasants, Koklass, Cheer and the Congo Peacock.

Pheasants are usually compatible for mixed aviaries. Although this can vary from species to species and from individual to individual. In European collections it has been the standard procedure to place pheasants with Parrot type birds. In some zoological collections, pheasants are well displayed and propagated in large flight cages.

Diet requirements are simple. Most pheasants can live normal healthy lives on any of several commercial game bird or poultry crumbles with some added grain. However, when attempting the propagation of the more exotic species a varied diet is essential for success. In my operation we feed several sources of high protein. Hardboiled eggs, mealworms and chopped fruit, such as apples are fed every other day. 20 to 22% protein game bird crumbles mixed with either Milo or Wheat are fed free choice. Grass is available in most aviaries and is used as a food source in varying degrees depending on the species. Small oyster shell is also provided during the spring months before egg laying commences.

It is important for several reasons to provide cover in the aviary for the hen to use as a nest site. First, a secure dark area will encourage egg laying. Secondly, if eggs are laid in secure areas there is less chance of the egg being destroyed by other aviary inhabitants between the time of egg laying and the collection of eggs by keepers. Egg eating is a problem in some species and with some individual birds although it can be overcome by prompt removal of eggs and/or saturation of the aviary floor with dummy chicken eggs.

I strongly recommend that eggs be collected from aviaries promptly and artificially incubated. Most pheasant hens are
very temperamental setters and should not be trusted with rare eggs to incubate. Eggs of most species of pheasants can be stored for up to 8 to 10 days with little or no loss of hatchability. During the time interval from laying to being incubated the eggs should be kept at about 60 degrees, turned 160 degrees daily and humidity should approximate the natural environment of the species. Eggs of pheasants with small clutch size such as Peacock Pheasants and Tragopans should be set within 4 days of being laid.

I have used both incubators and broody bantam hens for hatching pheasant eggs. Both methods have their respective advantages and skill and experience is necessary to be successful with either method. For the following reasons I use broody chicken hens in my operation almost exclusively.

1. Availability of good broody stock. Broodiness is inherited and my strain of setting hens has been reared and kept for setting for some 20 years.
2. My operation is located in an area of electrical power outages lasting from a few minutes to several hours. This is of great concern when using an electric incubator.
3. Broody hens with the proper environmental and hereditary background prove to be good mothers as well as setters and provide chicks with valuable security during the first few weeks of life and encourage chicks to start eating.
4. Ease of chick starting to feed with brooding hen serving as teacher.
5. Ease of brooding as the hen is the heat source and we don't need to depend on artificial electrical heat.
6. General attitude of chick is improved. Hen adds to stability. Youngsters are more gentle and less flighty as they mature, thus making better breeders and display birds.

It is important to match the size of the broody hen to the size of egg or adult pheasant so chicks are not hurt or killed by the broody hen being too large. When eggs are well pipped they are removed from the broody hen and placed in incubator hatching area to complete hatching and to gain strength for the first 12 hours. At that time, they are placed back with the broody hen still on the nest and after 2 hours placed with broody hen in rearing boxes. These boxes are 36" x 48" x 18" high. They are equipped with mason jar type waterer and heat lamp if the weather is still cold. The brooding pens are placed on grass and feed is placed on burlap material in the back 1/2 of the brooder. Food for young pheasants consists of 1/2 Game Bird starter crumbles, 1/4 White Millet, hardboiled eggs, mealworms and occasionally crickets. A broad spectrum antibiotic is used for the first two weeks in the drinking water of all gallineous birds hatched and reared in this manner.

Natural tree limbs of varying diameter are placed in each box for chicks to perch on if they desire. This is especially important for peafowl chicks and the arboreal Tragopans if crooked toes are to be avoided.

The chicks and broody hen remain in these brooding boxes until the chick reaches 2 to 3 weeks of age. At that time they are moved to rearing coops that are 4' x 12' x 8'. The broody hen is removed when chicks reach 6 to 8 weeks of age. At this point many of the hens have laid a clutch of eggs and are setting again and are ready to be moved into the setting house to begin the cycle over again. Chicks remain in these rearing pens until 6 to 8 months old when they are sold or moved to larger breeder aviaries.

Pheasants are colorful, easily managed and propagated, interesting to visitors and it is hoped that we will continue to establish strong breeding groups of these rare and exotic birds in zoological collections and private aviaries for future generations to appreciate and enjoy.