#### The Past, Present and Future of Aviculture and the Pet Bird Industry AAV 2011

Susan L. Clubb, DVM, Dipl ABVP (Avian)
Session #1205
Affiliation: From the Rainforest Clinic for Birds and Exotics, Inc.
3319 E Rd, Loxahatchee, FL 33470, USA.

The history of the pet bird industry and aviculture has been molded by events—tipping points—which have dramatically altered its course. Many of these formative events were based on disease outbreaks or regulatory changes. Our industry is now facing a new tipping point—one based on economic and social issues. While not directly affected by trends such as declining retail bird sales, avian veterinarians are indirectly affected as the numbers of patients and bird owning clients decline in a given geographic area. While there will always be faithful bird owners needing our services, will it be enough for us to concentrate our efforts on avian medicine in a changing economic climate?

## **Brief Overview of History of the Pet Bird Industry**

Prior to 1992, the history of the industry was tied to the importation of birds into the US. Records dating back to 1901 indicate a steady stream of imports rarely dropping below the 300,000 birds per year mark, except for a period between 1943 and 1967, during which no records were available. Psittacine imports were banned during this time because of a pandemic of "Parrot fever"—human chlamydiosis—which was traced to parrots. Psittacosis was named by a French physician, Morange, who described "parrot fever" in 1892, as a disease of humans and parrots. In 1929, pandemic psittacosis occurred in the United States with a concurrent worldwide outbreak again traced to parrots from Argentina. Worldwide investigation during the 1930's delineated the etiology and epidemiology of psittacosis. Imports of psittacines into the US were banned in 1942. In the 1960's, researchers at the Hooper Foundation developed treatment protocols in conjunction with the US Public Health Service for pre-entry treatment using chlortetracycline medicated feed. In 1968 treatment centers were established overseas where birds were held and treated for 45 days prior to importation. The import of wild or delicate specieswas facilitated by the advent of air transportation following World War II. Prior to this passage by ship was difficult for many species, but was still used for many birds well into the 1960s.

The second disease to dramatically impact the pet trade was Exotic Newcastle Disease, or Viscerotropic Velogenic Newcastle Disease (VVND). Psittacine birds traveling aboard sailing ships were thought responsible for the spread of the disease from its suspected point of origin in Java to Europe adSouth America between 1926 and 1942. An epornitic of a very virulent strain of VVND reached every continent between 1968 and 1972. In1972, an epornitic of VVND in California resulted in the first test of disease control by eradication on a national basis. The USDA undertook a massive depopulation effort of poultry and exotic birds. The fear of re-entry resulted in the establishment of the USDA quarantine system for all imported birds in 1974 and the Public Health Service program of foreign treatment centers was abandoned.

In 1974, the United States joined CITES, an international treaty, currently with 175 signatory countries. CITES regulates international trade in species listed on their appendices I, II, and III. International trade for listed species requires permits. In 1981 all psittacine species except peach-faced lovebirds, cockatiels, Indian ringnecked parakeets and budgerigars were listed in either CITES Appendix I or II resulting in monitoring and control of international movement of most parrots. For more information, visit CITES.org. In the years between the creation of the USDA quarantine system for imported birds in 1974 and the passage of the Wild Bird Conservation Act of 1992, 300,000 to 900,000 birds were imported into the US each year, approximately 75% of which were exotic wild-caught birds. The almost limitless supply of birds lead to an explosive growth in aviculture in the United States.

Aviculture and avian medicine experienced dramatic growth in the 1980s and 1990s. The AAV was established in 1980 as veterinarians "flocked" together to share information. Many disease issues were delineated during this time as well as diagnostics, surgical techniques and treatment protocols. It was also a time of dramatic growth for support industries, which provided products needed for the care and feeding of exotic birds, avicultural products, veterinary products, and laboratories catering to diagnosis and control of diseases. Feed manufacturers, caging manufacturers, toy makers, etc developed to fill the demand for bird related products.

The growth of the industry continued and in many ways flourished. From 1970 to 1992 the majority of available psittacines were bred for the first time in captivity. The 1980s represented the heaviest era for first-time breeding awards. Biological data were collected and published, and much of this information is useful for conservation efforts. This growth provided income for breeders to fund research. Purchases of supplies fueled product development. The utilization of veterinarians, especially for common procedures such as surgical sex-

ing, and pediatric procedures funded growth in avian medicine.

Avicultural groups, striving to enhance the image and operation of avicultural facilities, were established. The Model Aviculture Program (MAP) is an example of a well-developed, industry-based, voluntary selfregulation and improvement program. Unfortunately it is underutilized and facing an uncertain future. Passage of the Wild Bird Conservation Act of 1992, (WBCA) halted the importation of wild-caught birds listed on the Appendices of CITES except under strict exemptions, or species on exempt lists. For more information visit FWS.gov. Passage of the WBCA changed the entire complexion of the industry, shifting us from reliance on imports to a strong emphasis on captive breeding. Many aviculturists, excited about a surge in market potential, geared up to fill the demand for birds domestically. However, as the century turned, observers noticed an obvious decline in numbers of breeders. Through attrition the numbers of aviculturists were declining across the US. And while some new faces were appearing in the industry, for the most part, young people were not becoming enchanted with the hobby, or the industry. Member- ship in avicultural organizations and conference attendance declined steadily. Sales prices for birds during this time mostly remained stagnant, or as species became well established, prices declined, while prices of many supplies continued to increase. Aviculture was caught in a sort of economic stagnation. Other pressures were emerging, including relinquishment, rescue, sanctuary, and pressures from humane and animal rights groups. Controversy over these issues continues to affect perceptions about our industry.

### **Aviculture and the Pet Bird Industry Today**

To understand what is happening in aviculture, we need to understand what aviculture is. In the broadest sense, aviculture is the keeping, breeding, and caring for birds. Aviculturists can also be considered in broad terms to encompass a wide variety of avian enthusiasts including commercial breeders, hobby breeders, zoo keepers, pet owners, sanctuary and rescue groups, pet retailers, and veterinarians who provide health care. We are all interdependent on each other, but also with our network of pet stores, manufacturers, distributors, and suppliers of products needed to enhance our care of birds. In the present, we are facing recessional economic pressures that are rocking the entire avicultural family as well as the pet industry to the core. Many observers report a decline in pet bird sales, especially since the initiation of the current recession. In recent years, the number of active avicultural facilities has continued to decline across the country.

Reasons for the decline are varied but include too much work, static prices of birds while expenses rise, poor production, hard work, the high costs of land sufficient for facilities, zoning pressures, and pressure from humane groups. As older aviculturists retire without interested young people to mentor, we are losing a valuable knowledge base. While the science of aviculture may be recorded in the literature, the "art' of aviculture is endangered.

As a result of declining retail sales, breeders having declining orders from retailers turn to internet sales, close down nest boxes, or sell off breeding stock. Without bird sales, support industries including feed manufacturers, suppliers of caging, bedding toys, and avicultural supplies and products, etc. are also affected over time. Another disturbing trend which has been developing since passage of the WBCA is the loss of species diversity in American aviculture. Obviously the laws of supply and demand mold our industry as any other. Species which are not popular and don't sell well are sold off, or held without nest boxes. Species that become so common that the prices crash are not held back for future breeding stock. Species which don't adapt well to aviculture eventually age and are lost by attrition. There is little financial incentive to maintain many species in US aviculture unless a particular aviculturist chooses to do so solely for non-financial reasons. As a species becomes uncommon or disappears completely, future aviculturists will have no recourse to replace them due to difficulties of imports of stock under the WBCA, finding healthy stock abroad, and financing such a venture which might not be financially viable. Some species never adapted sufficiently to captivity to develop sustainable, multi-generational, breeding, and genetically diverse captive populations and will be forever lost to US aviculture.

The next regulatory hurdle we will soon face will be the implementation of regulations for birds under the Animal Welfare Act. Depending on the extent of these regulations, this change could have a big impact on aviculture.

Factors other than purely economic are also contributing to the decline in birds sales. Media and the internet are leading the way. Misinformation and negative information abounds on the internet. Reports of overpopulation abound but are poorly documented. Stories of hoarders, abuse, neglect and confiscation are widely circulated while stores of wonderful, loving bonds between birds and their owners are ignored. Rescuers and breeders are often at odds with each other. Sanctuaries that do not allow adoption remove potentially adoptable birds as a source for companion birds. The concept of "Birdy Mills" is especially damaging to our industry. Many species live a decade or more after there reproductive capability has declined. A glut of older birds from breeding farms will need homes. If the industry is fragmented and unable to support itself, what will become of these

retirement-aged birds?

As aviculture dies, so will our ties to conservation. Without knowledge of a species, there is little interest in preservation or protection of wild populations. Financial support for conservation as well as enhancement of aviculture techniques and collection of important biological data will be insufficient.

One major positive trend which developed within the last decade is the emphasis on behavior modification using positive reinforcement. Training techniques that previously were used only in shows and zoos are now becoming mainstream. Attendance at training seminars resembles attendance in years past on avicultural techniques and avian medicine. The emphasis of replacing unacceptable behaviors with acceptable ones is a powerful tool against relinquishment of pet birds based on behavioral problems.

#### What Will the Future Bring?

If current trends continue, the future of our industry may be vastly different than it is now. As aviculture declines so will the emphasis on avian medicine. Avian veterinary programs at most US veterinary schools have already been cut. With these cuts comes a loss of researchers, and the potential to develop vaccines, new treatments, new surgical procedures, etc. Membership, attendance and participation in avian medical conferences and associations will decline as practitioners focus on more profitable endeavors.

Products such as nursery equipment, incubation equipment, cages, perches, and other necessary supplies will become hard to find. Without large demand, food companies will limit product development and research into nutrition. Aviculture will return to old methods of feeding. Cages will be hard to find.

Companion birds will be limited to a few species. Others will be too expensive or not available at all. Color mutations and other "hobby" types of breeding may prevail, again expanding certain species availability while eliminating other less desirable species. Bird specialty stores are already becoming rare or uncommon due to pressure from chain super pet stores and internet sales. In the future it may be difficult for potential buyers to actually see and interact with a bird before they purchase, instead depending on photos and descriptions from internet listings. If current trends prevail, aviculture will focus on ever smaller number of economically important species. Zoo and specialty collectors may be only place to see many species.

Restrictive laws are surfacing on the state and local level that may limit localities where one is able to own birds. Noise ordinances and complaints from neighbors force many people to give their birds up. Those interested in preserving aviculture need to band together to fight adverse legislation. This will require support and membership in industry self-regulatory programs that enhance avicultural practices and bring aviculturists together working for common causes.

At some point if current trends persist, the industry as it is known will basically collapse from the reduction in bird and supply sales. Initially this phenomenon will affect retailers and breeders, then manufacturers and distributors. Avian veterinary offices will have a more prolonged decline due to the life span of psittacine species. But over time, they too will feel the effects of an ever-shrinking client and patent base. In many ways, aviculturists and avian veterinarians have drifted apart. Again this is based on economics. Breeders working on a low-profit margin find it difficult to pay ever-escalating veterinary fees. They resort to their own diagnostic and therapeutic regimens, some of which are effective and some not so effective. Laboratories provide direct disease testing to aviculturists who are then faced with challenges in interpretation and management of disease issues. As veterinarians see the time invested with aviculture being "less economically rewarding," they find little incentive to learn about the unique challenges of avicultural medicine. The once strong bond between aviculture and avian medicine is eroding.

#### **How Can We Mold a Positive Future?**

First and foremost unity in the industry is needed, with all working toward the goal of solving problems. In the information age, education of current and future pet bird owners will be paramount to creating a tipping point towards enlightened bird ownership. This educational effort should be part of operations for all aspects of the industry. Topics of vital interest include making sure each new bird gets off to a good start, as well as training to solve or prevent behavioral problems. Cooperation is needed to refute the concepts of poor care such as "Birdy Mills." Substandard facilities should be improved. Standards of excellence should be established and adhered to. Avian veterinarians should support the educational efforts of bird specialty stores, breeders, rescues, veterinarians, etc.

All involved with the industry can assist in taking in, caring for and ultimately re-homing unwanted birds. Hording of adoptable birds by sanctuaries and rescue organizations should be recognized as problematic. There is a demand for adoption of birds which are suitable for use as pets, and want to be pets. Re-homing of adoptable birds will free up sanctuary space for retired breeders which don't have "pet potential."

The strength of the industry requires that interested parties work together, buying bird products from good merchants, attending meetings and conferences, and supporting avicultural groups. Presenting an honest,

but positive image of the human avian bond and the joy that a well-behaved, healthy, well-cared-for pet bird can bring to their owner, can fight negative misinformation about owning a bird. Rescues which re-home birds should be supported.

Avian veterinarians and aviculturists need each other. Both groups must search for equitable ways to continue to work together in a changing economy. The "new normal" should be a well-trained, delightful, companion bird that will enchant people with not only their beauty and speaking ability, but also their behavior.

If current trends continue unchanged, pet stores of the future will have very limited selection of species, basically Cockatiels, Budgies, Lovebirds (if we can control psittacines beak and feather disease), Sun Conures, Indian Ring- necked Parakeets, and Red-rumped Parakeets. Aviculturists should be encouraged to adopt a declining species, keep a few pairs, and work to establish and protect genetic diversity so the next generation of aviculturists will have parental stock. Parent rearing, when possible, may help to maintain normal breeding and parental behaviors.

Aviculture and the pet bird industry requires avian veterinarians to do their part. They should share their interest in birds with others, especially with young people. Rather than discouraging others from enjoying birds, they should help people do their best in keeping captive birds and should be the one source that people could trust to get the real scoop. In this way it is possible to build a future in which aviculture and pet bird ownership are once again celebrated and enjoyed so all can appreciate the beauty and wonder of birds and pass these living resources on to future generations.

# **Recommended Reading**

- Findings and Recommendations of the Cooperative Working Group on Bird Trade. Washington, DC: World Wildlife Fund: 1990.
- Clubb SL. Laws and regulations affecting aviculture and the pet bird industry. In: Altman RB, Clubb SL, Dorrestein GM, Quesenberry KE, eds. Avian Medicine and Surgery. Philadelphia, PA: WB Saunders; 1997.
- 3. Jordan R. Is there a future for aviculture? Paper presented at: Parrot Festival; January 28–30, 2011; Houston, TX.