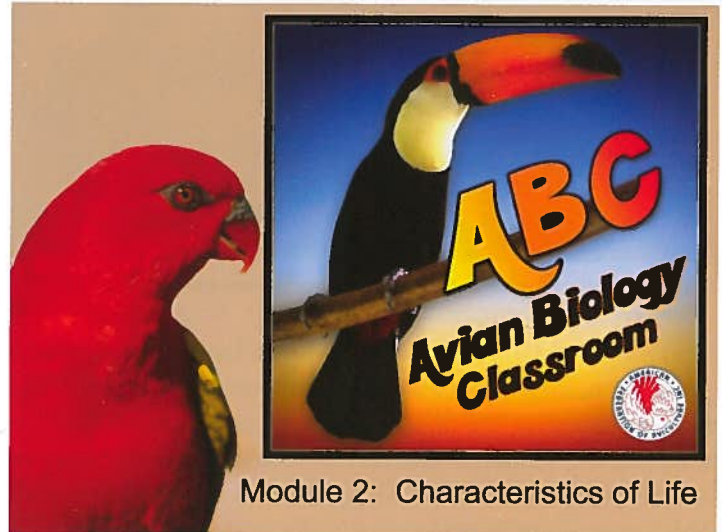


# The Avian Biology Classroom (ABC): A NEW EDUCATIONAL EFFORT FOR AVICULTURE

By Jason J. Crean, MA, MS

For many years I have shared my fascination and interest in birds with my own biology students at both the high school and university level; and the opportunities to do so are endless. One can discuss birds when teaching about the intricacies of ecosystems and the vital roles birds play, or how different species reproduce in an effort to pass on their genes to the next generation. Recently I used birds to bridge evolutionary topics, particularly how species have adapted to their environments, to homeostasis, the ability of organisms to maintain balance in their bodies. When I introduce topics, I like to start with a phenomenon, something that is quick to catch the attention of the students. So, with the help of my own birds and some feathers donated by friends like Steve Duncan, I provide my students with different types of feathers. Some feathers were used for flight and others, like that of the emu, have no flight advantage but are good for insulation. Without telling students anything about the feathers or the birds that shed them, they engage in comparing them to determine their probable function. I then show them some of the recent findings in dinosaur feathers; and they quickly realize how similar the feathers of the emu are to the feathers trapped in fossilized amber. This leads them to start questioning whether these dinosaurs were warm-blooded or not and what other evidence had been discovered that could support that claim. We even discuss that birds roaming the Earth today are actually considered “avian dinosaurs”, though all “non-avian dinosaurs” have gone extinct. Needless to say, the students are motivated to find out more.



Module 2: Characteristics of Life

It is experiences like these that motivated me to begin designing an educational program that would teach biological concepts through aviculture. I have been blessed to have been recognized for my teaching, including by the President of the United States; and this has afforded me countless opportunities that I never thought possible. This includes unique training opportunities that enhance my teaching and increase the teaching tools I have at my disposal. In my work outside the classroom, I have had the opportunity to work with geneticists, paleontologists, veterinarians, evolutionary biologists, ichthyologists, animal nutritionists, zookeepers and others. From these collaborations, I get so excited that I compose classroom activities that use the work of these real-world scientists so students can see how science works. One example is my Zoo Genetics curriculum ([www.xy-zoo.com](http://www.xy-zoo.com)), a free curriculum written in collaboration with Dr. Jean Dubach, geneticist at the Wildlife Genetics Laboratory in Chicago. This curriculum has garnered much attention because of its ability to teach students through the use of interesting storylines with pertinent research questions. As I have traveled the country over the years speaking at both professional conferences and avicultural groups, it is clear that people want to hear the stories behind the science. So why not share these with students, club members, or anyone who could benefit from learning more about birds?

With all the countless groups to which I've presented, it is clear the aviculturists have a love of learning. Yes, it's true that some claim to know more than others, but it's quite clear that everyone can stand to continue their learning as

This beach towel and more great 'Parrotphernalia' from  
**The 14 Karat Parrot** - since 1982

Hundreds of gifts & accessories for exotic bird lovers!

[www.14karatparrot.net](http://www.14karatparrot.net)  
Ask for 10% member-to-member discount!

WELCOME

new ideas are put forth. The ABC program aims to do just that. With each module, a presentation walks participants through content and engages the learner. Each module also includes accompanying guided notes so participants can follow along with the presenter. Presentation notes are embedded so the presenter has additional background when presenting the content to the observers. An additional “sense-making” activity helps reinforce the content taught and exposes the learners to a real world example of how science is used to study birds and/or their environments. All of these materials are available on the AFA website under the Education tab. All materials are free for download and are in PDF format. The PowerPoint is also available as a ‘read-only’ file. In the first module that is available, the kakapo is featured, and one of the conservation studies is highlighted. Thanks to Robin Shewokis for her wonderful pictures from her trip to visit the kakapo in New Zealand. The support activity highlights the work with owls done by AFA member Caroline Efstathion; so thanks must also go to her for her work and contribution to our program. It is my hope and the hope of the entire AFA Education Committee that reviews these materials before publication, that bird clubs and classrooms alike can make use of these modules and continue the learning experience for their members and students, all the while keeping birds in the spotlight.



**TGi**  
Clean Air & Water  
diminish dust • eliminate odors • remove irritants

**Brigitte Cornelius**  
800-544-7168  
847-394-2047

**Ask about AFA discount!**  
tgicleanair@hotmail.com  
www.myvollara.com/clnair



**Birdie Britches Bird Toys**  
Extraordinary Toys for Extraordinary Birds

Wholesale Available | M2M  
Special Pricing for Clubs  
720-936-4016  
birdiebritches@gmail.com

~ Fresh and Creative Designs ~  
~ Tactile, Captivating and Fun ~  
~ Inspired by Birds, For Birds ~

www.birdiebritches.com



# 2014 DVD Collection

Now available in the AFA Store [www.AFABirds.org](http://www.AFABirds.org)  
Many more titles available !

Bob Nelson—Keynote Address

*Quaker Mutations*

Kateri Davis—Introduction to Turacos in Aviculture

*Introduction to Mousebirds in Aviculture*

Jason Crean—Zoo-trition Going raw in your avian diet

Patricia Anderson, PhD—*The Moral status of the Quaker parakeet: Green angels or winged demons*

Alicia McLaughlin, DVM—*Aspergillosis in Birds: The fungus among us*

Chris Shank—*Positive Parrot Training*

Sally Huntington—*Handrearing: Hatching to Weaning*

Roland Cristo—*Breeding soft-billed song birds*

Kit Lacy—*Raptors*

Patty Strand—*Animals, public policy and the animal rights agenda*

Caroline Efstathion—*The role of disease in parrot conservation efforts*

Katy McElroy—*Ten years with Palm Cockatoos: Notes on breeding management and pet quality*

Nyla Copp—*Out on a Limb*

Ian Heap, PhD—*Birds of the Australian Outback: Tales of a bird-loving Aussie*