



**Pionus
Parrots
Research
Foundation**

The Fat Parrot

Volume 1, Number 1

November, 2000

In This Issue

- Ö Acquisitions ... (2)
- Ö Costa Rican Undergrad Joins Team ... (1)
- Ö Commercial Sponsor Announced ... (2)
- Ö From The Managing Director ... (3)
- Ö Help Wanted ... (3)
- Ö In The Literature ... (2)
- Ö Membership Drive Launched ... (1)
- Ö 2001 Ecuador Study Plans ... (1)
- Ö That Pi Smell ... (3)

About This Issue...

This is the first newsletter of the Pionus Parrot Research Foundation. It's being distributed to members and potential members. The newsletter will be available in PDF format for downloading from the PPRF web site (www.fatparrots.org), and also in printed format. If you prefer to receive this newsletter electronically (and save the PPRF printing and mailing costs) just email us at fatparrots@geek.com.

Costa Rican Joins Study Team

Viviana Ruiz, a Costa Rican college student majoring in biology and ecology, will be an active participant in the winter 2001 study.

Viviana attended high school in the United States and is interested in working with parrots when she graduates.

In addition to participating in the work in Mindo, she is preparing a research project involving White-capped Pionus parrots in Costa Rica.

PPRF Announces Winter 2001 Study

A 10 person research team funded by the PPRF will conduct a three week-long study in Mindo Ecuador beginning in late January, 2001. The group will be looking at behaviors of Bronze-winged, Coral-billed, and White-headed Pionus flocks that presently live in Ecuador's Mindo Valley.

Typically all three species move to nests in February, so the group will be watching for examples of aggression associated with mate selection, the process used to establish nesting sites, and flock behaviors of non-nesting birds. Some members of the team will spend one of the three weeks searching for the roosting areas the birds are suspected of frequenting in the southern end of the valley.

Because of the topographical features of the valley, observation of groups of parrots is not particularly difficult, however, our preliminary study last fall suggests that the nesting and roosting areas are confined to relatively inaccessible sections of the valley.

The group will be doing point counts and transect counts during the first two weeks in an effort to firmly establish the daily routes that these three flocks tend to follow. That information will be especially valuable for developers of conservation plans in the region and to researchers looking for feeding/foraging data.

Membership Drive Launched

Russ Shade, PPRF Managing Director announced recently that a member recruiting effort is presently underway.

The PPRF is offering a Reliance wrought iron parrot cage (model WB 321 or WB 322) to a person whose name will be drawn from the list of folks purchasing memberships in the PPRF by 12/31/2000.

The Reliance cage is well-suited to Pionus parrots because it is a "wide-style" cage measuring 36" wide, 24" deep, and 70" high. The cage has an electrostatic powder coated finish, swing-out feeder doors, stainless steel feeder cups, a nestbox door, pill out bottom grill for easy cleaning, top and bottom metal pans, safety locks, horizontal side bars, and a play area on the cage top. The cage can be completely disassembled for easy cleaning and/or moving.

A variety of other prizes is being offered by PPRF commercial sponsors – the list of items is growing.

The PPRF has also sent a mailing to all known bird clubs both in the US and abroad.

If you are a member of a club, please encourage your club leadership to join us in our efforts. If you need brochures or other material, please contact the Managing Director at rshade@fast.net.

Membership fees help to fund the PPRF's research projects and library development activities. Members receive this newsletter, access to the library, information they can use in club newsletters, and timely notice of research results relating to behavior observed by field scientists. The PPRF is the only organization conducting primary research on Pionus parrots.



First Commercial Sponsor Announced

We're pleased to announce that Avitech Exotic Birds of Frazier Park, California has joined the PPRF as a commercial sponsor. Avitech is owned and operated by Janelle Crandell and her husband Ed, and has been offering expertly-raised birds and a full line of avian and breeders supplies since 1984. Avitech has donated a full spectrum floor lamp, an ionfrared heat panel, and a container of Oxine disinfectant to our fall membership effort.

Avitech is known throughout the avian community as a strong supporter of both research and rescue operations. We encourage you to visit their website at <http://www.avitec.com> and to patronize them for your avian needs whenever possible. Thanks, Avitech!!

In The Literature

One of our favorite journals is the *Interpretive Birding Bulletin*. Published 6 times a year by Dr W. J. Davis of St Cloud, Minn, the journal contains fascinating reports on a wide variety of behavioral subjects.

The Sept/Oct issue (Vol, no.5) includes articles about foraging behavior, how birds use distinctive odors to attract parasites to their nests (wonder what that Pi smell might really be about?), and learning in birds (including an interesting section on how handfed chicks may be being shortchanged). The July/August issue (Vol, no.4) includes an article on sentinel behaviors (page 7) and calls (page 9), and begging calls/behaviors (page 6).

An IBB subscription costs \$30.00 annually. Some articles can be read at their website, www.ibirding.com. PPRF members can borrow the PPRF copies.

Acquisitions

We have recently obtained a copy of Dr. Kirk Klasing's book, **Comparative Avian Nutrition**. Klasing is an avian nutritionist (yes, they really do exist) at UC Davis. The book addresses Klasing's contention that different species have different nutritional requirements based on the physical structure of their digestive systems. Klasing clearly identifies deficiencies in what is known and lists those studies that have made major contributions to what we do know. It helps to have a good understanding of organic chemistry to follow along with some of the topics covered, however the book is not so complex that the average aviculturist could not learn something of value from it.

We now own a large quantity of PBR back issues and well as some 16 issues of Parrots magazine, a British avicultural journal.

We have the 2000 Spring and Fall issues of Cotinga, the journal of the Neotropical Bird Club.

We've recently obtained a dozen back issues of the British Magazine Parrots (several of which include articles about Pionus parrots, including one written by the late John Stoodley).

Catherine Toft, Ph.D. of the Department of Avian Sciences at University of California, Davis, and scientific advisor to the Pionus Breeders Association has given us a copy of her paper The Genetics of Captive Propagation for Conservation: A Manual for Aviculturists, produced for the Psittacine Research Project. This is an interesting discussion of factors related to genetic changes which occur when species are captive-bred in isolation from wild populations. Many aviculturists believe that aviculturist's efforts can assist in re-establishing wild populations of near-extinct parrots.

Toft's paper highlights facets of the controversy this topic engenders in both the avicultural and conservation communities.

Just this week we obtained a fascinating article by Jay Withgott about the role of ultraviolet reflectance and its role in the life of birds (*BioScience*, October 2000, vol 50, #10, 854-859). There are several researchers who have been working with ultraviolet light as it relates to birds and their work is beginning to suggest that ultraviolet light may play a hugely significant role in how birds recognize each other for breeding purposes, signal each other, and identify food sources – for example, many fruits and seed pods advertise themselves to seed-dispersing birds with UV reflecting exudates.

Researchers have known for some time that birds' retinas contain a type of cone specifically designed to detect UV light – cones that almost all mammals lack. Many insects exude UV reflecting compounds, and early thinking was that birds had these special cones to enable them to locate insects (animal protein). However, during the 80's, scientists began looking at the possibility that UV light may play a role in avian behavior. So far, it's been conclusively determined that 35 species of birds from many different orders, rely on UV light for a variety of purposes.

Andrew Bennett of the University of Bristol, began looking at how bird plumage reveals itself in response to UV light in an effort to get around the human bias that colors all avian behavior studies. The article describes what he and other researcher have found to be a hitherto-unknown world of perception. The pictures in the article are very interesting.

The PPRF is interested in acquiring UV photos of Pionus plumage. If you have UV photography equipment or know of someone with such equipment, please contact Russ Shade (rshade@fast.net) or 610-767-8595.

Be sure to visit the world's most comprehensive collection of Pionus links at <http://www.fatparrots.org>.



That Pi Smell

Nobody lives with a Pionus parrot of any species without noticing the distinctive odor these parrots give off – in fact, we've heard rumors about chapters of Pi-Sniffers Anonymous springing up all over the world! Those of us who keep several species have noticed that the quality of the odor varies by species. Others have noted that breeding birds seem to have a stronger odor than non-breeding birds.

But until now, the reason why a bird would have a distinctive odor like this was unknown. Some behaviorists have theorized that Pionus and some other New World parrots used the odor to help differentiate between sexes.

Dr Donald Brightsmith of Duke University, an active AFA member and researcher working with macaws at Tambopata and other amazonian birds, has published an article about how neotropical birds establish relationships with ants and termites to help keep their nests clean. Although he does not specifically mention Pionus parrots in the paper (his work involved trogons and parakeets in Peru), the birds he studied preferred to nest in areas where stingless ants and termites were freely available. The ants and termites help to keep active nests clean – a huge and important job as any breeder of Pionus parrots will attest. Additionally, the insects also not only deter predators (including large vertebrate predators such as tree snakes), but will actually fight to drive them off. Additionally, there is evidence that related birds which do not have a strong musty odor do not share their nests with insects.

One of the goals of the PPRF's Bronze-winged Pionus Research Project is to monitor active nests. We'll be on the lookout for insect activity which supports Brightsmith's observations.

Here are some related papers worth investigating:

- Brightsmith, D.J. 2000. Use of arboreal termitaria by nesting birds in the Peruvian Amazon. *Condor* 102:529-538
- Clark, K.L. and Robertson, R.J. 1979 Spatial and temporal multi-species nesting aggregation in birds as anti-parasite and anti-predator defenses. *Behav. Ecol. Sociobiol.* 5:359-372
- Davis, W.J. 2000. Nest Associations. *Interp. Birding Bull.* Vol 1:5:1-5

From The Managing Director

Pi's are great companions – that's something every aviculturist can agree on – from their gorgeous plumage to their large, expressive eyes and playful nature, these birds offer something for everyone.

We founded the PPRF to help fill the huge gaps in our avicultural and scientific knowledge of this species for it's our assertion that only by knowing the nature of their lives in the wild can we come to a full appreciation of their value in the chain of life.

Please take a few minutes to read about what we've accomplished so far, and then join with us to accomplish our goals for the future. In just two short months, we'll be traveling to Mindo, Ecuador where we hope to gather important information about these birds. We hope that you will see fit to assist in this project by donating gifts of money and time.

All of us with pet birds spend large amounts of money for food, toys, vet bills, magazine subscriptions, books, and convention/seminar expenses. The food gets eaten, the toys need to be replaced, the vet bills recur annually, magazines and books get read, and the conventions and seminars come around every year.

But a gift that you make to the PPRF will benefit Pi's forever – not just those captive birds, but also the populations in the wild, since the information we gather in our fieldwork will be of immense value to other organizations planning conservation activities.

If you're not presently a member, please join. Thanks to the support by some of our commercial sponsors, your \$30.00 membership just might result in your getting a beautiful new cage, a full spectrum lamp, or an infrared heating panel. We're giving away all these items and more to folks whose names will be drawn from the list of all members who join before the end of the year.

However, more than that, we need the support of clubs and other organizations who proclaim their purpose for existing is to further our knowledge of parrots. I can think of no more fitting way to achieve that goal than by participating in active field work such as that being done by the PPRF. Please contact your club officers and ask them to seriously consider supporting our efforts.

Help Wanted

Whew! We sure could use a newsletter editor willing to learn Adobe PageMaker and assist with compiling The Fat Parrot.

We're also looking for a volunteer librarian to keep track of the research material we are accumulating and managing member loans. A minor task at this point, eventually our collection will increase significantly as we secure more materials. It would be a big help if the librarian was also familiar with HTML to help keep the library web page updated. Please contact the Managing Director at rshade@fast.net or 610-767-8595 (evenings) if you're interested in either job.

© 2000

Pionus Parrots Research Foundation, Inc.
PO Box 34, Danielsville, PA 18038