

THIS MONTH'S GUEST SPEAKER

## Edward O. Moll

Adjunct Professor  
School of Renewable Natural Resources  
University of Arizona

### Last Call for the Drummer: A Global History of River Turtle Decline

7:15 PM

Tuesday, October 19th

Arizona Game and Fish Department Office

555 North Greasewood Road

(between Speedway and Anklam, west of Pima Community College.)

Throughout their careers, Ed and Don Moll have been fascinated by the diverse and often spectacular turtles that inhabit the world's rivers. Both brothers have traveled extensively throughout the New and Old World to study and observe these amazing chelonians. Some are truly beautiful animals, with finely chiseled and ornamented shells, while others sport some of the gaudiest colors imaginable. Still others, such as the softshells, are most unturtle-like in appearance with flattened, leathery shells and proboscis-like snouts. Some attain sizes which approach and even exceed proportions commonly associated with marine species. Many of these species can be exceptionally abundant in prime habitat and thus play key ecological roles within their fluvial ecosystems.

Despite these attributes, the majority of the world's river turtles are little studied and poorly-known. Many lead secretive lives in great rivers of remote, often politically unstable regions, where study and law enforcement are difficult at best. Collectively, these factors have masked the magnitude of the destruction of these species without mitigating the tragedy of its reality. Over a third of the hundred plus riverine species can be categorized endangered

and their plight continues to worsen. To summarize what is known about the world's river turtles and to publicize their current problems, Don and Ed wrote a book entitled, *The Ecology, Exploitation, and Conservation of River Turtles* which has recently been published by Oxford University Press. Tonight's presentation, based on this book, details the history of river turtle decline, particularly the Asian Batagur baska (aka the drummer) which Ed Moll has studied for nearly thirty years.

Ed Moll is Professor Emeritus at Eastern Illinois University and an Adjunct Professor for the School of Renewable Natural Resources, University of Arizona. He currently serves on the Board of Directors for THS.

## 2005 Slate of Candidates

The Board of Directors was presented with and accepted the slate of candidates for the November elections. The following people are on the Officer's slate:

President	Young Cage
Vice President	Eric Stitt
Secretary	Robert Bezy
Treasurer	Marty Tuegel

Nominees for Directors are (3 openings):  
Kevin Bonine, Elissa Ostergaard, Robert Villa, and Erin Zylstra.

Other nominations may be submitted directly to the Board by ten or more members with the consent of the candidate, and must be received at least two-weeks prior to the Annual Meeting (received by 02 November 2004 for the November 16th meeting). Thanks to the Nominating Committee, Cristina Jones (chair), Taylor Edwards, and Craig Ivanyi for putting together an excellent slate of candidates. Please note the Annual Meeting and Election will take place on 16 November 2004.

NEXT MONTH'S GUEST SPEAKER

## Dawn Wilson

Ecology of the Western Pond Turtle, *Actinemys marmorata*, in the northern Sacramento Valley

Tuesday, November 16th

Tucson Herpetological Society meetings are open to the public and are held on the third Tuesday of each month starting at 7:15PM

**Figure 1.**  
High above the Altar Valley,  
Baboquivari Peak stands  
witness over the Buenos Aires  
National Wildlife Refuge.  
Photo by Erik F. Enderson



## Friends of Buenos Aires National Wildlife Refuge

### Roy Emrick

Vice Chair, Friends of BANWR

The Buenos Aires National Wildlife Refuge (BANWR) was created in 1985 with the primary mission of restoring the masked bobwhite quail. Its historic range appears to have just extended into Southern Arizona. Cattle grazing had reduced the quail's grassland habitat so that the species was no longer found in Arizona. Grass cover is necessary for the survival of chicks. An original area of 112,000 acres lying primarily east of Arizona route 286 and north of the US-Mexico border was purchased. Wayne Schifflet undertook the responsibility of transforming this aging ranchland into the multi-species habitat of today. Wayne's efforts have made the area a favorite of hunters, hikers, campers, birders and sightseers.

Wayne's dedication to wildlife, range improvement, and land acquisition did not come without controversy. Indeed, the transfer of Chiricahua leopard frogs led to felony charges against him and his early retirement. (Similar transfers on other refuges have not been challenged.) A more detailed account can be found at <http://www.dailystar.com/dailystar/dailystar/22308.php>

Managers of other National Wildlife Refuges are also under great political pressure over grazing issues, fire management, encroachment of transmission lines on the refuge, border crosser/Border Patrol activities

and the like. Private organizations exist to provide support for the Refuges, one of which is Friends of BANWR. The Friends perform many activities such as raising funds to support activities not readily available through NWR channels, conduct educational workshops, tours of the Refuge, lectures and interpretation to neighboring communities and make comments on management plans. They offer serious criticism of management decisions which do not further the mission of the refuge.

The terms of two Friends Board members are expiring at the end of this year and two have had to resign because of outside commitments. The Friends would be delighted to hear of those willing to run for a position on the Board. Expertise in biology, range management, zoology, etc. is not necessary, but would be helpful. (The author of this article is a physicist.) The Board meets quarterly, usually at the Refuge. It is a wonderful excuse to spend a day in an awesome location and make a valuable contribution as well.

If you have interest in running for the Board or have any questions, please feel free to contact me.

Roy Emrick

Vice Chair, Friends of BANWR [rmemrick@cox.net](mailto:rmemrick@cox.net) 520 326 7883

## BOOK REVIEWS

**Lizards: Windows to the Evolution of Diversity.** 2003. Eric R. Pianka and Laurie J. Vitt. Foreword by Harry W. Greene. University of California Press. 333+xiii pages. 8 tables, 31 figures, 218 color photos. \$45, cloth. ISBN 0-520-23401-4.

### Kevin E. Bonine

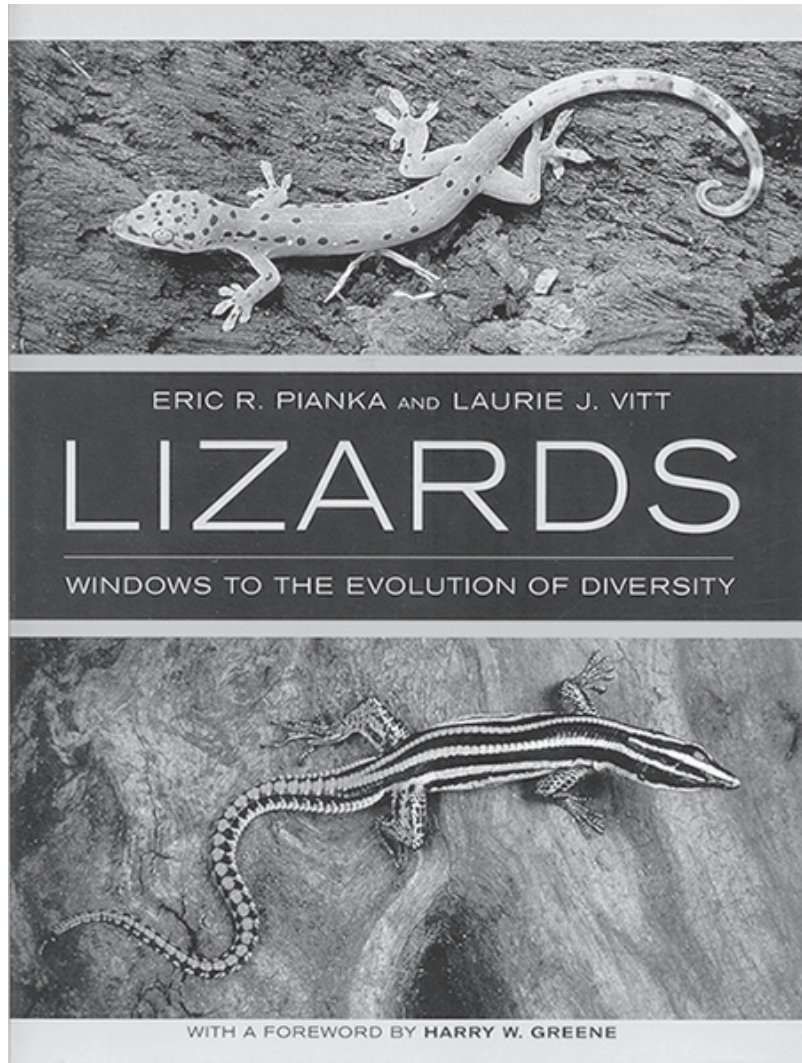
Department of Ecology and Evolutionary Biology and School of Natural Resources, University of Arizona. kebonine@u.arizona.edu

From the perspective of a lizard lover, who better to write a book about lizards than Eric Pianka and Laurie Vitt? Together, these two biologists have amassed decades of data, anecdotes, and injuries while studying lizards the world over. Their recent book is an enjoyable way to share the wonder and delight of lizard biology with a broad audience. Picture the two of them sitting together brainstorming the best way to portray the excitement of their life's work; this book is what they came up with. By matching readable text with many amazing photos and entertaining anecdotes, Vitt and Pianka present lizards in a much more accessible way than a typical scientific paper or edited academic volume.

*Lizards* is the 5<sup>th</sup> in a series on organisms and environments from the University of California Press. Harry Greene serves as consulting editor. Other books in this series include Grismer's (2002) work on Baja herpetofauna and Nabhan's (2003) *Singing the Turtles to Sea*, about herpetofauna and Seri Indian culture in Sonora, Mexico. Similar to these other books, *Lizards* is produced with high-quality paper, with many excellent photographs and figures, and in standard 8.5x11 format. A few of the photos either did not reproduce well or were slightly out of focus, but overall the group of over 200 full color photographs is a delightful sampling of lizard diversity and many portray unusual and interesting behaviors.

Pianka and Vitt begin with a brief introduction that attempts to place lizard research in a broader scientific framework. They also explain their motivations for studying lizards and sharing their knowledge, ending with a caution about the rate at which we are altering habitats not only for lizards but for all life, including humans. The book is then broken into three sections: lizard lifestyles (chapters 1-7), lizard diversity (chapters 8-13), and synthesis (the last two chapters). An appendix lays out a

short table of all extant lizard genera. A healthy sampling of lizard references follows a three-page glossary and the book ends with an index that aids navigation to species (including indication of photographic representation), higher taxa, or subjects of interest.



The first chapter (eight pages long) is a whirlwind introduction to squamate evolution, phylogenetic history, and biogeography. While chapter one is a nice concise overview, a deeper understanding of these issues should be sought elsewhere by interested readers. Morphology, physiology, foraging ecology, predation (on and by lizards, and sometimes both), interspecific interactions, life history, and community ecology are all

touched on in the remainder of the first section. The authors provide many useful examples and cite many important previous publications, including their own research, and occasionally make as-yet-unsubstantiated claims. Sometimes these are presented clearly as hypotheses to be tested, sometimes not. In this first section of the book it becomes apparent that the authors are not consistent with their citation of other biologists' work. A few times, several works are cited when one would suffice, but more often no citation is given for facts and assertions that need one. However, the book does well to introduce most of the interesting research topics in lizard biology and interested readers can dig further into specific areas of fascination.

The first section of the book sampled broadly to illustrate diversity at the expense of a logical, phylogenetic sequence of information. Such a sampling approach is useful for introducing readers to the amazing biology to be found across lizards. The other approach, found in the second section of the book, organizes chapters based on phylogenetic groups. This is a more intuitive perspective which provides context for the diversity of lizard adaptations, behaviors, and life-history traits. On several occasions information for a given group ends up being covered twice (e.g., horned lizard defense strategies), once in the first section of the book during relevant ecological discussion and then again during the specific treatment of that group of lizards. The result is a book that feels less like one that should be read cover to cover at one sitting, but one to be perused here and there to gain a richer understanding of lizard diversity and the historical events and relationships that may help explain observed biological patterns.

Synthesis, the third section, contains one chapter that explores the evolutionary history of lizard groups in more detail and a second chapter that explicitly talks about human relationships with lizards. The take-home message is that we are doing our best to truncate millions of years of adaptation and radiation within this amazing group of vertebrates.

One of the delights of the book are the many "anecdote boxes" scattered throughout each chapter that relate an interesting natural history observation, describe interactions with other noted ecologists, and convey noteworthy pitfalls and successes of decades of lizard research. Each anecdote, attributed to one of the authors, gives the reader the sensation of being on a herping trip with two lizards legends listening to the stories and life highlights that tend to creep to the surface during a few hours or days in the field. My favorite is late in the book when Pianka relates Vitt's suggestion that herpetology should be a spectator sport like football; all the diving and chasing deserves recognition for the athletic and humorous pastime that it is.

Among the changes I would like to see made in this book is inclusion of global range maps for the major

lizard clades. Without such maps it is hard to visualize large-scale biogeographic patterns; genera-scale maps could then be found in recent herpetology textbooks (Zug et al. 2001, Pough et al. 2004). Some of the tables and figures are overly simplistic or contain minor errors. For example, figure 3.2 describes autarchoglossa as having "low sprint speed", but then on page 66 autarchoglossans are described as having "high running speeds." More citations should be included throughout the book, but perhaps the authors and the publisher made a conscious decision, in the spirit of improved readability for a general audience, to omit many relevant citations.

Pianka and Vitt's *Lizards* can be placed in a similar category as Greene's (1997) *Snakes*. Herpetologists will love this book. The inquisitive non-herpetologist may become a convert after thumbing through its delightful pages and learning not only about the amazing world to be discovered in lizards, but also how personally exciting and rewarding the search for lizard knowledge and understanding can be.

#### Literature Cited

- Greene, H.W. 1997. *Snakes: the evolution of mystery in nature*. University of California Press.
- Grismer, L.L. 2002. *Amphibians and reptiles of Baja California, including its Pacific islands and the islands in the Sea of Cortez*. University of California Press.
- Pough, F.H., R.M. Andrews, J.E. Cadle, M.L. Crump, A.H. Savitzky, K.D. Wells. 2004. *Herpetology*, 3<sup>rd</sup> edition. Prentice Hall.
- Nabhan, G.P. 2003. *Singing the turtles to sea: the Comcáac (Seri) art and science of reptiles*. University of California Press.
- Zug, G.R., L.J. Vitt, and J.P. Caldwell. 2001. *Herpetology: an introductory biology of amphibians and reptiles*. Academic Press.

*Dr.*

## BOARD MEETING SYNOPSIS

28 September 2004

Robert L. Bezy, Secretary

**Directors Present:** Roy Averill-Murray, Bob Bezy, Taylor Edwards, Cristina Jones, Ed Moll, Roger Repp, Eric Stitt, Marty Tuegel.

**Directors Absent:** Young Cage, Hans Koenig, Don Swann.

**Members Present:** Dennis Caldwell.

### Treasurer's Report – Marty Tuegel

Beginning Balance	\$9,800.14
Deposits.	299.00
Expenses	125.45
Ending Balance	9,973.69

Speakers Bureau	742.61
Jarchow Award	185.00
FTHL Fund	226.00
C.H.Lowe Research Fund	3,269.00
General Fund	5,551.08
CRHSD (CD)	\$7,220.70

Itemized Deposits: FTHL Fund \$10.00, Jarchow Award \$15.00, Lowe Fund \$15.00, Membership \$249.00, Speakers Bureau \$10.00.

Itemized Expenses: S. H. Printing \$125.45.

### Committee Reports

#### Conservation – Dennis Caldwell.

The brochure on *Living with Venomous Reptiles* has been submitted to the AGFD and is expected to go to the printer soon. Caldwell attended a *Rana chiricahuensis* recovery meeting in Silver City on 9-10 Sept. The recovery plan is proceeding. **Roy Averill-Murray** discussed a proposed project involving the analysis of price lists for amphibians and reptiles and the change in price over time in relation to changes in the degree of protection for each species.

#### Speakers Bureau – Taylor Edwards and Ed Moll.

**2 September – Taylor Edwards** presented a talk to the Reid Park Zoo docents.

**24 September – Robert Villa** gave a presentation with live herps at Bookman's at Speedway and Wilmot to 8 adults and 15 children.

**25 September – Ed and Judy Moll** represented the THS at the third annual Harvest Moon Festival that is hosted by the Pima County Parks Association at the Tucson Mountain Park. They presented local herps and answered questions to some hundred adults and children.

**Taylor Edwards** will present slides and the THS display board at the October General Meeting.

#### Program – Roy Averill-Murray.

The lineup of speakers includes:

19 Oct. – Ed Moll

16 Nov. – Dawn Wilson

21 Dec. – Young Cage

#### PARC – Roy Averill-Murray.

The National PARC steering committee met 27 September in Atlantic City, New Jersey. The National PARC website has been thoroughly revised (same address); information regarding applications to the Lowe Research Fund should be added to its grants page.

#### Old Business

##### SABHA Home Show – Cristina Jones.

Volunteers are need for the THS table at the show (15-17 October).

##### 2005 Nominations - Cristina Jones.

The Board approved the slate of candidates assembled by the Nomination Committee (Christina Jones, Craig Ivanyi, and Don Swann).

#### New Business

##### Donation by Dan Beck – Repp.

The Board discussed the generous offer by Dan Beck to donate a percentage of the profits from his book (in press) on Gila Monsters to the THS.

##### Skeleton Canyon – Taylor Edwards for Andy Holycross.

The Board discussed the issue of the recent closure of the road in Skeleton Canyon due to gate locked by a property owner.



## ANNOUNCEMENTS

### Sonoran Herpetologist Announcement Policy

Sonoran Herpetologist announcements are a free service of the Tucson Herpetological Society for its members. Items or events to be announced must fall within at least one of these three categories:

1. Conservation of native wildlife or wildlife habitat
2. Education about native wildlife or wildlife habitat
3. Research of native wildlife or wildlife habitat

Sonoran Herpetologist announcement items or events must not promote:

- the destruction of native wildlife or habitat;
- the commercialization (selling and/or trading) of wildlife, dead or alive.

Decisions about announcement qualification are made by the board-appointed editorial committee of the Sonoran Herpetologist. All inquiries should be directed through the editor.



### Sonoran Herpetologist Natural History Observations

The Tucson Herpetological Society invites your contributions to a regular feature in the *Sonoran Herpetologist*, Natural History Observations of southwestern herps. Similar to Life History Notes in *Herpetological Review*, these can include information such as size, behavior, diet, predation, community structure or other interesting observations. Please submit your noteworthy observations to Dale Turner (dturner@theriver.com), editor for this section. Submissions should be brief, typed double-spaced, and in electronic form if possible.



### Sonoran Herpetologist Local Research News

The Tucson Herpetological Society has started a column in its monthly newsletter, *The Sonoran Herpetologist*, titled, "Local Research News". We want to update our readers on interesting herpetology research projects happening around the state.

We are currently collecting pieces for submission. The submissions need not be more than a few paragraphs and do not need to include data, specific localities or other details. The emphasis should be on how science is being applied to herpetological questions.

The style and format are very informal (see *SonHerp 13:123 for an example*). I will be happy to help with editing or if you already have a brief description or project summary, I will be happy to assist in formatting it.

Don Swann donswann@dakotacom.net.



## MEMBERSHIP

### Membership Information

Individual	\$20	Sustaining	\$30
Family	\$25	Contributing	\$50
Student	\$14	Life	\$500

To receive a membership form and recent issue of *Sonoran Herpetologist* call (520) 624-8879 or write:

Tucson Herpetological Society  
P. O. Box 709  
Tucson AZ 85702-0709

### Time to Renew Your THS Membership?

I hope this is a helpful reminder to those of you whose membership renewal is due this month. Please call or email with corrections and errors. 624-8879 or dhardysr@theriver.com

Dave Hardy Sr.  
Membership Secretary

### Due in October:

Danny & Sharon Brower	Scott Cashins
J. M. Jacobson	Hans Koenig
Travis LaDuc	Hugh & Rebecca McCrystal
Douglas & Laurie Moore	Dave Prival
Priscilla Titus, Eric Stanford & Jon Titus	Dale Turner & Julia Fonseca
Alex Wood	Lori & Jesse Jones Woods

### Membership Update

As of 4 October 2004

### Sustaining Members

none

### New Members

Mark Brock	Apache Junction, AZ
Kerrah Cutter	Tucson

### Contributing Members

Mark Brock	Apache Junction, AZ
Jay Cole & Carol Townsend	Tucson
Brooke Gebow	Tucson

### Jarchow Conservation Award

Brooke Gebow	Tucson
Michael Samuels	Tucson

### Speakers Bureau

Brooke Gebow	Tucson
Michael Samuels	Tucson

### Horned Lizard Fund

Brooke Gebow	Tucson
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### Charles H. Lowe Herpetological Research Fund

Brooke Gebow	Tucson
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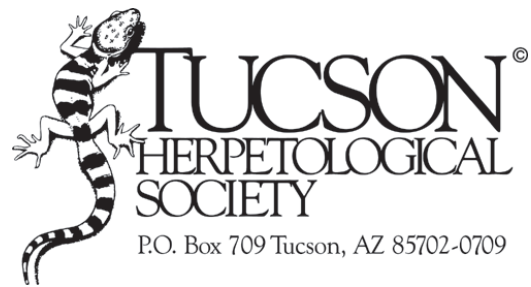
**Membership**

Dave Hardy Sr., dhardysr@theriver.com

**Information for Contributors**

Authors should submit original articles, notes, book reviews to the Editor, either via email using an attached word processed manuscript or by mail to the Society's address. The manuscript style should follow that of *Journal of Herpetology* and *Herpetological Review*, publications of the Society for the Study of Amphibians and Reptiles. For further information, please contact Erik Enderson at eenderson@cox.net

**Deadline for SonHerp 17 (11)  
November 1**



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**Vice President** Eric Stitt, ecstitt@earthlink.net

**Secretary** Bob Bezy, bezyr@theriver.com

**Treasurer** Marty Tuegel, mtuegel@yahoo.com

**Directors**

Cristina Jones, cajones@u.arizona.edu 2003-2004

Hans Koenig, hfkoenig@comcast.net 2003-2004

Ed Moll, e.o.moll@att.net 2003-2004

Roy Averill-Murray, averill\_murray@email.msn.com 2004-2005

Roger Repp, rrepp@noao.edu 2004-2005

Young Cage, ydcage@aol.com 2004-2005

**Past President** Don Swann, donswann@dakotacom.net

**Society Activities**

**Monthly Members Meeting**

Roy Averill-Murray, Program Chairperson

3rd Tuesday, 7:15 PM

**Board of Directors Meeting**

October 26, 7:00 PM

Arizona Game and Fish Department Office

555 North Greasewood Road

**Speakers Bureau** (Scheduled presentations)

Taylor Edwards, Director

Ed Moll, Director

**Conservation Committee Director**

Dennis Caldwell

**Herpetological Information Hotline**

Bob Brandner 760-0574

**Jarchow Conservation Award**

Taylor Edwards, Chairperson

**Publications:**

*Sonoran Herpetologist*

*Living with Rattlesnakes*

*Living with Gila monsters*

*THS Herp Coloring Book*

*THS Collected Papers, 1988-1991* (out of print)

**THS Internet World Wide Webpage**

<http://tucsonherpsociety.org>

Erik Enderson eenderson@cox.net

*The Tucson  
Herpetological  
Society is  
dedicated to  
conservation,  
education, and  
research  
concerning the  
amphibians and  
reptiles of  
Arizona and  
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For more information about the THS and the reptiles and amphibians of the Tucson area visit **tucsonherpsociety.org**

Your membership has expired.  
This is your only reminder.  
Please renew!



# SONORAN HERPETOLOGIST

Newsletter-Journal of the Tucson Herpetological Society

**October 2004, Volume 17, Number 10**

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## **BOOK REVIEWS**

95 Lizards: Windows to the Evolution of Diversity, by Kevin Bonine