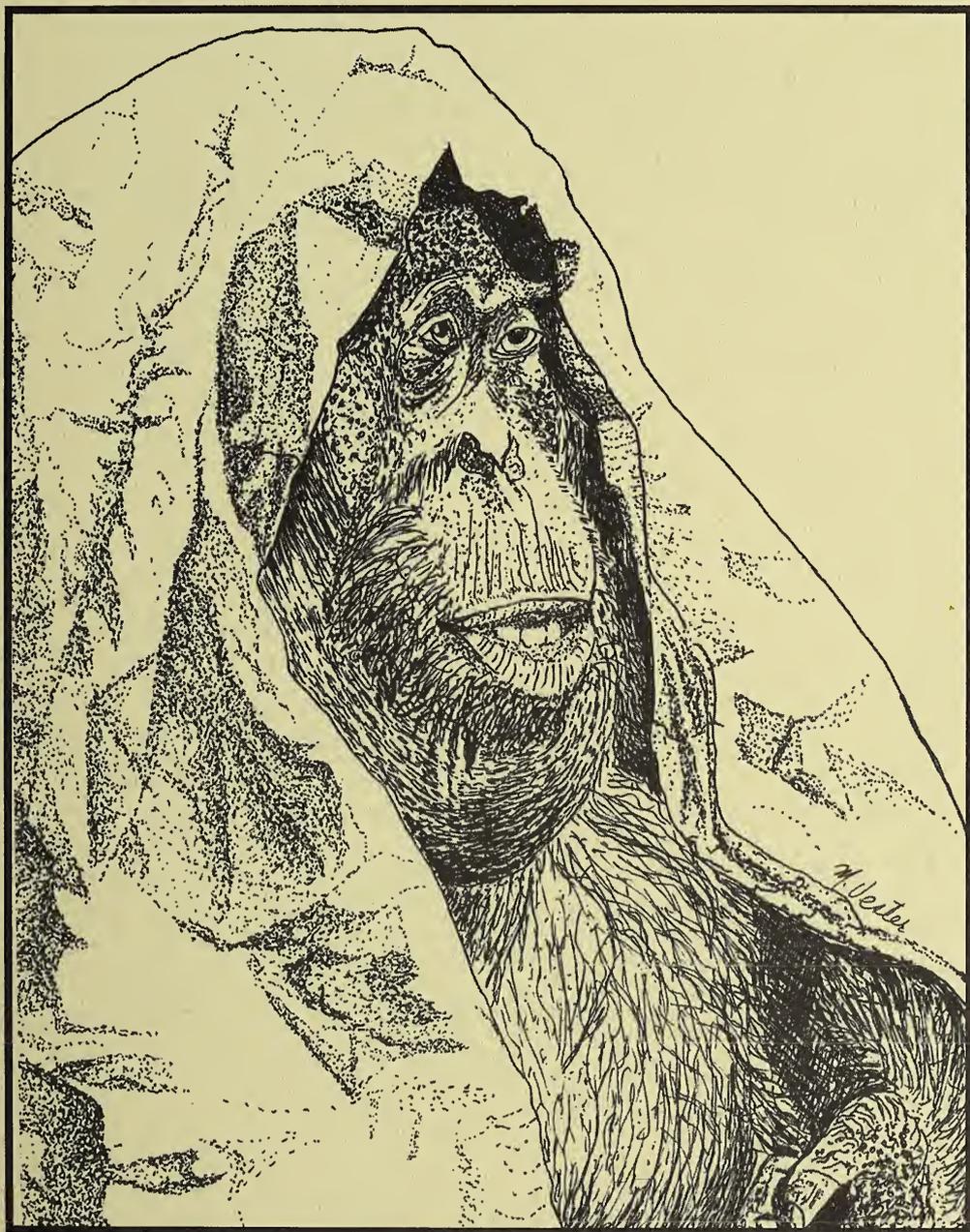


ANIMAL KEEPERS' FORUM



JANUARY 2011

The Journal of the American Association of Zoo Keepers, Inc.

ANIMAL KEEPERS' FORUM, 3601 S.W. 29th St., Suite 133, Topeka, KS 66614-2054

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also serves as **AAZK Liaison to the American Zoo & Aquarium Association (AZA)**

AAZK Administrative Secretary: Barbara Manspeaker, AAZK, Inc., Topeka, KS

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or at www.aazk.org

Table of Contents

About the Cover/Information for Contributors.....	2
Scoops & Scuttlebutt.....	3 - 4
Coming Events.....	5
From the Executive Director.....	6
AAZK Announces New Members.....	8
Professional Development Committee Update 2010.....	9
2011 AAZK Conference Information/Updates.....	10 - 11
Great News: AZA Animal Care Manuals.....	12
Resource of Interest: Pocket Guide to Kansas Snakes.....	13
CPR Grant Report 2010: <i>Acres for the Atmosphere</i>	14 - 15
Keeper Profiles DVD Order Information.....	16
Book Review (<i>Standard Common Names for N.A. Amphibians, Turtles, Reptiles and Crocodilians</i>).....	17
Training Tales (<i>When Maintenance Doesn't Require a Work Order</i>).....	18 - 20
AKF Dedicated Five-Issue Combo Pack on Sale.....	21
Devastating News from Lewa/Poachers Claim 2nd Rhino at LWC.....	22 - 23
"Trees for You and Me" FAQ and Chapter Challenge.....	24 - 25
Debuting New AAZK Fleece Vests.....	26
Reactions (<i>Primary Containment</i>).....	27 - 29
It Takes a Village to Move a Bison.....	30 - 32
Conservation in Your Community.....	33 - 37
Conservation/Legislative Update.....	38 - 42
<i>Animal Keepers' Forum</i> 2010 Index.....	43 - 48



36th Anniversary - 1974 - 2010

MISSION STATEMENT

(Revised April 2009)

American Association of Zoo Keepers, Inc.

The mission of the American Association of Zoo Keepers, Inc. is to advance excellence in the animal keeping profession, foster effective communication beneficial to animal care, support deserving conservation projects, and promote the preservation of our natural resources and animal life.

This month's cover features a Bornean Orangutan (Pongo p.pygmaeus) drawn by Marie Vester, a Docent and Research Volunteer at the Los Angeles Zoo and Botanical Gardens in Los Angeles, CA. In the drawing the orang named Eloise uses a sheet for a sunshade. She also likes to use burlap bags and cardboard boxes provided by the Zoo's Behavioral Enrichment (B.E.) staff. Volunteers and keepers fill bamboo with raisins, mustard and honey. They sprinkle nuts and fruits around the exhibit. They bring something different every day. Often the orangutans will use something they are given in a way volunteers and keepers hadn't predicted. Keepers gave the orangutans rattan baskets expecting the apes to carry things around in them. Instead, they used their exceptional manual dexterity to unweave the baskets, showing off to each other the longest pieces of rattan. Orangutans are the largest arboreal mammals found on earth today. They are semi-solitary animals, but complex social networks of loose relationships are maintained between members of a community. Males tend to disperse further than females at maturity. More than 500 plant species have been recorded in their diet. Fruits make up more than 60% of their average total intake but their diet also includes leaves, barks, flowers and insects. Females generally give birth to a single infant after a gestation period of approximately 245 days. Female Bornean orangutans reach maturity between 10 and 15 years old and reproduce every six to eight years on average. Next to human, orangutans spend the longest period of time rearing their offspring. There has been an estimated decline of orangutan well over 50% during the last 60 years. The decline of the species is predicted to continue at this rate, primarily because of forest loss due to conversion of forest to agriculture and fires, although poaching and the pet trade also contribute to this species' declining numbers. The Bornean orangutan is a fully protected species in both Malaysia and Indonesia legislation. This species is listed on Appendix I of CITES and also listed as Endangered on the IUCN Red List. Thanks, Marie!

Articles sent to *Animal Keepers' Forum* will be reviewed by the editorial staff for publication. Articles of a research or technical nature will be submitted to one or more of the zoo professionals who serve as referees for *AKF*. No commitment is made to the author, but an effort will be made to publish articles as soon as possible. Lengthy articles may be separated into monthly installments at the discretion of the editor. The editor reserves the right to edit material without consultation unless approval is requested in writing by the author. Materials submitted will not be returned unless accompanied by a stamped, self-addressed, appropriately-sized envelope. Telephone, fax or email contributions of late-breaking news or last-minute insertions are accepted as space allows. Phone 785-273-9149; FAX (785) 273-1980; email is akfeditor@zk.kscoxmail.com< If you have questions about submission guidelines, please contact the Editor. Submission guidelines are also found in the Members Only section of the AAZK website.

Deadline for each regular issue is the 10th of the preceding month.

Dedicated issues may have separate deadline dates and will be noted by the editor.

Articles printed do not necessarily reflect the opinions of the *AKF* staff or the American Association of Zoo Keepers, Inc. Publication does not indicate endorsement by the Association.

Items in this publication may be reprinted providing credit to this publication is given and a copy of the reprinted material is forwarded to the editor. If an article is shown to be separately copyrighted by the author(s), then permission must be sought from the author(s). Reprints of material appearing in this journal may be ordered from the editor. Regular back issues are available for \$4.00 each. Special issues may cost more.

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AAZK website Address: www.aazk.org

BFR Website: <http://aazkbfr.org>

Scoops & Scuttlebutt



Reminder to All Chapters on Recharter Process for 2011

All AAZK Chapters are reminded that the rechartering of all Chapters will begin this month. Rechartering packet information has been sent electronically via email to the email address your Chapter provided to the Administrative Office in 2010. These emails were sent the first week in January. **NOTE:** If your Chapter has changed its email contact address since you completed your 2010 recharter forms, you need to notify Barbara Manspeaker immediately (aazkoffice@zk.kscoxmail.com) so that your recharter materials are properly received. Recharter Packets for 2011 are due back at Administrative Offices **by 15 February 2011** (with a late fee penalty of \$250 after **1 March 2011**).

If you do not receive your recharter packet materials, you need to contact Barbara at the email address above or by calling 785-273-9149. If you have questions about filling out the required information, give Barbara a call and she will be glad to help you out. Receipt of rechartering information from **every** AAZK Chapter is required as AAZK, Inc. needs to submit certain information to the Internal Revenue Service in order to protect and maintain the Association's 501(c)(3) nonprofit status. Your prompt attention to this matter is greatly appreciated.

Candidates Sought for AAZK Board of Directors Election

It's time to nominate your candidates for the upcoming AAZK Board of Directors Election. Nomination forms will be due at the AAZK Administrative Office **by February 28, 2011**. The nomination forms, as well as criteria for nominations, may be found in the Members' Only section of our website at **aazk.org**. The 2011 election will be done electronically, so be aware that you need to go to **aazk.org** to vote. Additionally, your Professional Membership status must be current and you must be registered on the Members' Only section of **aazk.org**. Here are the key dates:

- February 28, 2011 – Nomination forms are due at the Administrative Office
- April 1, 2011 – Viewing of candidate profiles opens in the Members' Only section
- April 15, 2011 – June 1, 2011 is the official voting period
- Results of the 2011 election will be announced after the verification of ballots, around June 10, 2011.

AAZK Awards Committee Now Accepting Nominations

The American Association of Zoo Keepers Awards Committee is accepting nominations for the Lifetime Achievement Award, the Jean M. Hromadka AAZK Excellence in Animal Care Award, The Lutz Ruhe Meritorious Achievement - AAZK Professional of the Year Award, the Lee Houts Enrichment Excellence Award, the Certificate of Merit for Zoo Keeper Education, the Certificate of Excellence in Exhibit Renovation, the Certificate of Merit in Conservation, the Mazuri Animal Nutrition Award, and The AAZK Chapter of the Year Award that will be presented at the 2011 AAZK Conference in San Diego, CA. The deadline for nominations is **1 May 2011**. Information concerning the qualifications, nomination procedure, selection procedure and an explanation of the awards may be obtained at www.aazk.org, under committees/awards.

AZA Professional Training Course:

Animal Training Applications in Zoos and Aquariums

March 6-11, 2011 hosted at Disney's Animal Kingdom, Orlando, FL.

Get hands-on experience in training animals! This course provides zoo and aquarium staff with a background in training theory and an understanding of the skills necessary to train animals. It includes a historical perspective of animal training as well as terminology and an overview of training techniques. Selected training concepts and skills will be taught via animal demonstrations, group activities and individual skill development opportunities. For more information: <http://www.aza.org/professional-training/>

Rhino Note Cards Still Available for Purchase



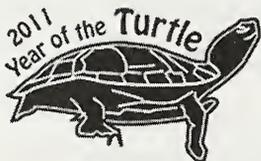
There are still a few cases of rhino notecards available for Chapters to purchase. Rhino cards are in full-color. Each case costs \$243.75 and includes 25 individual boxes that hold ten cards per box. They are disappearing quickly, so if you are interested in purchasing another case or two, please contact AAZK President Shane Good at shane.good@aazk.org

Assistance Sought in Felid Squeeze Cage Design

“We are looking for a design for a squeeze cage for lions and tigers. It needs to be portable. If you have any photos and blueprints or suggestions, please email me at tigress1@tigerlink.org. Tiger Creek Wildlife Refuge is an AAZK Institutional Member in good standing and has been featured on Animal Planet® in “Growing Up Tiger”. ~ Terri Werner, Co-Founder / Director of Operations, Tiger Creek Wildlife Refuge, Tiger Missing Link Foundation, 17552 FM 14, Tyler, TX 75706. Phone: 903-858-1008.

2011 Year of the Turtle: Why Turtles, and Why Now?

Turtle conservation groups in partnership with Partners in Amphibian and Reptile Conservation [PARC] are designating 2011 as the Year of the Turtle. Turtles are disappearing from the planet faster than any other group of animal. Today, over 40% of turtle species are identified as threatened with extinction worldwide. However, it's not too late for our turtle heritage to be salvaged. The United States has more endemic turtle species than anywhere on Earth; a turtle biodiversity hotspot. Our careful stewardship can preserve the rare species and keep 'common species common.'



You can help! Sponsor a turtle conservation or awareness event in your community. Give an educational talk. Volunteer with Year of the Turtle activities or with turtle conservation organizations in your area. For other ideas or to sign up for the newsletter, visit www.yearoftheturtle.org

www.yearoftheturtle.org < Or contact us at yearoftheturtle2011@gmail.com



2010 AKF Index Included in this Issue

A complete index of all the articles, columns, conferences and symposia as well as Association news that was published in Nos. 1-12 during 2010 appears at the back of this issue of *Animal Keepers' Forum*. A sincere thank you to Brigitte Thompson, a keeper at the North Carolina Zoological Park in Asheboro, NC for compiling the index for 2010. This is no small task and I would personally like to thank Brigitte for her assistance and support of AKF. ~ Susan D. Chan, AKF Editor



NATIONAL
ZOO KEEPER
WEEK

July 17 - 23, 2011

Starting Planning Now!

Coming Events

Post Your Coming Events Here
email to: akfeditor@zk.kscoxmail.com

February 16-19, 2011 - 19th Annual Conference International Association of Avian Trainers and Educators ~ "Pittsburgh 2011: Innovation and Inspiration" Hosted by National Aviary in Pittsburgh, PA USA. Papers, posters, site visits, vendors and workshops. Topics will include avian behavior, training, husbandry, conservation, education, enrichment and show presentation/production. For more information about the conference visit www.IAATE.org

March 2-4, 2011 - Association of Professional Wildlife Educators. To be held at the Frank Buck Zoo, Gainesville, Texas. Watch <http://www.apwe.org/> for details as they become available.

March 8-11, 2011 - Zoos and Aquariums Committing to Conservation. Hosted by the Woodland Park Zoo, at Sheraton Seattle Hotel, Seattle, WA, USA. Icebreaker planned for evening of March 7th. Registration now open at www.zoo.org/zacc

March 19-24, 2011 - Save the Date! The 2011 AZA Ungulate TAG Midyear Meetings are being planned in conjunction with the AZA Midyear workshop in Chattanooga, TN. The exact dates of the Ungulate TAG meetings will be determined soon. This year the meetings will include midyear working meetings for the following AZA TAGS: Antelope and Giraffe, Equid, Cervid, Caprid, Wild Pig and Peccary and the Cattle TAG, as well as the Annual Ungulate TAG Research Symposium. AZA has announced that the registration rates will remain the same as the rates in 2009 and the Conference Hotel will be the Chattanooga Marriott with conference rates of \$135/night. Contact Martha Fischer at fischer@stlzoo.org for more information.

April 17-22, 2011 - 11th Annual Animal Behavior Management Alliance (ABMA). In Denver, CO. The conference will kick off with our keynote speaker, Dr. Jill Mellen from Disney's Animal Kingdom, and will culminate with an Earth Day to remember at the Denver Zoo. See (<http://www.theabma.org/>) for further information.

May 15-18, 2011 - 2011 Rhino Keeper Workshop. To be held at Fossil Rim Wildlife Center, Glen Rose, Texas. For further info contact: adam.felts@columbuszoo.org

August 8-14, 2012 - The World Congress of Herpetology - To be held in Vancouver, Canada. For more information see <http://www.worldcongressofherpetology.org/>

October 6 - 9, 2011 - Advancing Bear Care 2011
To be held in Banff, Canada. Bear biologists and naturalists will lead hikes into bear habitat and interpret for delegates how bears use the components of the ecosystem to express their daily and seasonal routines. We will bring this information back into workshops and apply this knowledge towards improving captive bear husbandry. Also, international bear biologists will assist us in interpreting Asian, European, and South American bear habitats. Conference updates will always be posted on the Bearcare Yahoo Group list serv <http://ca.groups.yahoo.com/group/bearcare/> You will be able to advertise your need for roommates, rides, conference questions etc. on this list serv. To join just send an email to bearcare-subscribe@yahoogroups.ca

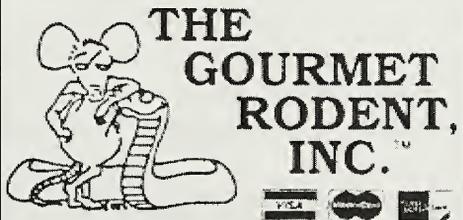
Upcoming AAZK National Conferences

2011 - San Diego, CA - August 24-28
see <http://sdaazk.com>

2012 - Syracuse, NY - September 23-27

2013 - Asheboro, NC - Dates TBA

For information on upcoming AAZK conferences, watch the AAZK website at www.aazk.org



RATS AND MICE

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From the Executive Director

I think every year in the month of January I state the same exact sentence: Change is stress. If I said this time 2011 will not be a year of change for AAZK, I would flat out be lying to you.

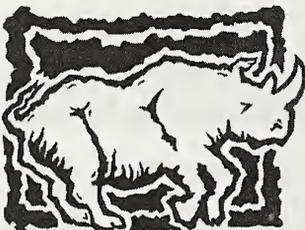
Nominations for the AAZK Board of Directors are open at this moment. The membership will vote in new directors, with new ideas and direction. The coming years for AAZK are years of important change. Leadership is the key to making those changes productive for the membership. We need a full slate of qualified candidates. We need you. Look in the Member's Only section of the website for qualifications, nomination forms and further information.

Bowling for Rhinos continues to evolve. The stated goal from the Board of Directors is to reach \$500,000 per year in money raised. I believe we can reach this goal by 2015. But this will take participation from every AAZK Chapter, and we must recruit more facilities without AAZK Chapters into the program. Get involved now.

Exciting changes are coming for the National Conference in San Diego that will slowly move AAZK from the traditional classroom model of "lecture-learn" to a more productive educational model of "discussion – interaction" member participation. AAZK understands that we must embrace the role of continuing education for our membership to provide more value to the member. The Professional Development Committee is up to the challenge. We need to break the mold.

The AAZK Board will lose its President in 2011 at the conclusion of the San Diego Conference as Shane Good has completed his term on the Board of Directors. Vision is Shane's strongest asset, and the Board will certainly miss the bigger picture viewpoint. Shane will be missed.

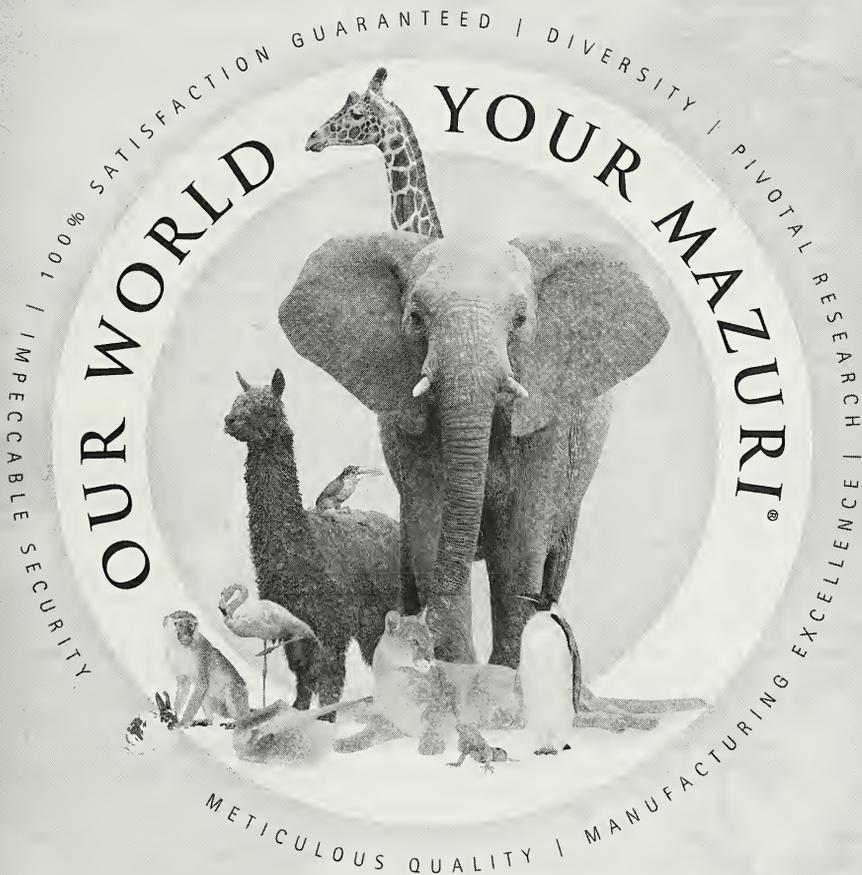
In December of 2011, Susan Chan will sunset her career as the Managing Editor of *Animal Keepers' Forum*. From a "newsletter" printed by copy machine to its current evolution as a magazine with an international membership, *AKF* is the most recognized product of AAZK. If the membership is the heart of AAZK, *AKF* is its soul. You cannot lose a gate keeper of Susan's stature without an effect on the entire Association. Susan will be missed.



AMERICAN
ASSOCIATION
of ZOO KEEPERS

Finally AAZK realizes that we sometimes treat our Chapters as subordinates, not partners. I give you my word – this year AAZK will be granting Chapters a voice in the way the Association operates. While the AAZK Directors represent the members by election, Chapters do not have a voice. We're working to change that.

Ed Hansen, AAZK Executive Director



We're evolving the new generation of exotic animal nutrition. Today, Mazuri offers food products for more animal species than any other company in the world. For over 20 years, we've worked in collaboration with world-class zoos, aquariums, owners & breeders around the globe to develop the highest quality product for your animals. Trust in the security of Mazuri for the health and longevity of your exotic animal.

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AAZK Announces New Members

New Professional Members

Michelle Breen and Duane Long, **Southwick's Zoo (MA)**; Erik Montgomery, **ZooAmerica (PA)**; Kathleen McNamara, **The Maryland Zoo (MD)**; Meghan Morgensen, **Reston Zoo (VA)**; Jennifer Rawlings, Elizabeth Fusco and Elizabeth Berry, **Riverbanks Zoo (SC)**; Bria Rydzewski, **North Carolina Zoo (NC)**; Lenore Braford and Timothy Wewer, **Carolina Tiger Rescue (NC)**; Justin Garner, **Zoo Atlanta (GA)**; Nicola Segens, **Sea World of Orlando (FL)**; Shelby Bush and Suzie Buzzo, **Tallahassee Museum (FL)**; Tom Walling, **ZooWorld (FL)**; Faren Healey, **Palm Beach Zoo (FL)**; Mary Yoder, **Cleveland Metroparks Zoo (OH)**; Christopher Gertiser, **Binder Park Zoo (MI)**; Tara H.Lieberg, **Lake Superior Zoo (MN)**; Julie Yarrington, **Como Park Zoo (MN)**; David Ely, **Dakota Zoo (ND)**; Scott Kubisch, **Lincoln Park Zoo (IL)**; Chelsey Aitken, **Wright Park Zoo (KS)**; Andrea O'Daniels, **Kansas City Zoo (MO)**; Beth Richmond and Erik Hauptman, **Omaha's Henry Doorly Zoo (NE)**; Ashley Schweinhart and Daryl McGill, **Audubon Park Zoo (LA)**; Rita Huang, Cindy McCaleb and Ashley Orr, **Dallas Zoo (TX)**; Amanda C. Cooper, **San Antonio Zoo (TX)**; Jamie Ohrt, **Frank Buck Zoo (TX)**; Ian Ross, **Cameron Park Zoo (TX)**; Lori Miller, **El Paso Zoo (TX)**; Betsy Hall, **Phoenix Zoo (AZ)**; Jarred Burelson, **The Roo Ranch (AZ)**; Julie Mudd, **Arizona-Sonorra Desert Museum (AZ)**; Jessica Orlick, **Bearizona Wildlife Park (AZ)**; Greg Bowder, **Rio Grande Zoo (NM)**; Hali O'Connor and Richard Switzer, **San Diego Zoo (CA)**; Donald Zeigler, **Orange County Zoo (CA)**; John Beaver, **Happy Hollow Zoo (CA)**; Karen Harris, **Great Cats World Park (OR)**; Caitlin Capistrone, **Honolulu Zoo (HI)**; and Amanda Dionne Wilde, **Assiniboine Park Zoo (MB, Canada)**. *(We do not publish the names of new and/or renewing members who do not list their facility on their membership application/renewal. There were four in December/January)*

Renewing Contributing Members

Mark Hofling, Bronx Zoo (NYZS), Bronx, NY
Susan Moy-LaVeau, Lincoln Park Zoo, Chicago, IL
Natalie Lindholm, Dallas World Aquarium, Dallas, TX
Charlene C. McKee, Thornton, CO

New Institutional Members

Southwick's Zoo, Mendon, MA
Wildwood Wildlife Park, Minocqua, WI
Tanganyika Wildlife Park, Goddard, KS
Jim Fouts, Director
TGR Exotics, LLC, Spring, TX
Oakland Zoo, Oakland, CA
Colleen Kinzley, Curator

Zoo of Acadiana, Broussard, LA
George Oldenburg, Facility Owner

Renewing Institutional Members

Rosamond Gifford Zoo at Burnet Park, Syracuse, NY
Chuck Doyle, Director
Elmwood Park Zoo, Norristown, PA
David Wood, General Curator
Brandywine Zoo, Wilmington, DE
Nancy Falasco, Director
North Carolina Zoo Library, Asheboro, NC
Dr. David Jones, Director
Brookgreen Gardens, Pawley's Island, SC
Andrea DeMuth, Curator
Libraries Serials Acquisition
Michigan State University, E. Lansing, MI
Como Park Zoo & Conservatory, St. Paul, MN
Michelle Furrer, Director/Campus Manager

Ellis Library - Serials
University of Missouri Columbia, MO

Dickerson Park Zoo, Springfield, MO
Mike Crocker, Director

Pikes Peak Community College
Zoo Keeping Technology Program
Colorado Springs, CO
Tracy Anderson, Director

Little Rock Zoo, Little Rock, AR
Michael Blakley, Director

Houston Zoo, Inc., Houston, TX
Rick Barongi, Director

California Wolf Center,
Julian Center for Science, Julian, CA

Gorilla Foundation Library, Redwood, CA
Dr. Penny Patterson, Director

Fresno's Chaffe Zoo Corp., Fresno, CA
Scott Barton, CEO/Executive Director

Chimps, Inc., Bend, OR
Lesley Day, President, Board of Directors

Renewing Commercial Members

Desert Plastics, LLC, Albuquerque, NM

Professional Development Committee Update 2010

submitted by Ellen Vossekui, Keeper 2

Utah's Hogle Zoo, Salt Lake City, UT

The year 2010 has been a big year for the Professional Development Committee. To start, we have added two new members to the committee. Welcome Anthony Nielson (Lincoln Park) and T'Noya Thompson Gonzales (Moody Gardens)!

The Professional Development Committee's Mission is to provide continual resources for professional growth through leadership and educational opportunities for all National AAZK members. To accomplish that mission, PDC put together two workshops for the 2010 AAZK conference; a rotational exhibit workshop and a dedicated passerine workshop. The rotational exhibit workshop featured presentations from four different facilities, each explaining the layout, benefits and challenges of rotating animals through multiple exhibits.

The passerine workshop was led by Robert Webster, Curator of Birds at the Toledo Zoo and Vice Program Leader of the PACCT TAG. Experts from 11 different AZA zoological institutions were gathered to speak on various topics related to bird collections in their facilities. The passerine workshop was sponsored by Marion Zoological, Mazuri, and Disney's Animal Kingdom. A huge thank you goes out to our sponsors!

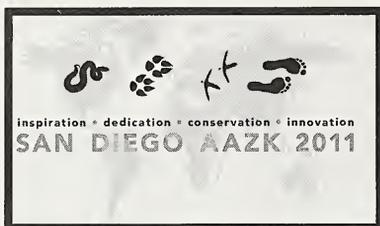


As a new feature this year, all Pdf files from these two workshops are now available online at the AAZK website (www.aazk.org) in the Members Only section, on the Professional Development Committee page. We plan to continue posting workshop information on the website to expand the audience who has access to new and relevant husbandry information.

The future for the PDC looks busy! We are currently working with the conference committee at San Diego AAZK to finalize the workshops for the 2011 National Conference in San Diego. In addition, The Professional Development Committee is working with the Board of Directors and members of the Association of Zoos and Aquariums on a keeper certification process. Although this process is in the very beginning phases, it promises to further the mission of the PDC by continuing to provide educational opportunities for professional growth.

The Professional Development Committee welcomes your feedback! Please contact our Chairperson Melaina Wallace (Disney's Animal Kingdom), or any of the committee members below.

- Bob Cisneros, San Diego Zoo - Committee Oversight
- Kelly Wilson, Detroit Zoo
- Victor Alm, Oakland Zoo
- Bandy Hicks, Whitetail Veterinary Services
- Leanne Blinco, Disney's Animal Kingdom
- Mike Murray, Denver Zoo
- Aaron Jesue, North Carolina Zoo
- Amanda Hall, Scovill Zoo
- Anthony Nielson, Lincoln Park
- Eunice Hui, Coyote Point Museum
- Dawn Sohr, Brookfield Zoo
- Andrew Rowan, Denver Zoo
- Ellen Vossekui, Utah's Hogle Zoo
- T'Noya Thompson Gonzales, Moody Gardens



The 38th Annual AAZK National Conference San Diego, CA: Aug 24-28, 2011

As we enter 2011, our San Diego AAZK Board is extremely excited to announce that as of January 1, 2011, conference registration will be available by visiting www.sdaazk.org. Here are some updates for you to peruse so you can plan your trip to San Diego next August! Hope to see you and don't forget to bring your suntan lotion!

Registration

Online conference registration will be preferred, however other options will be made for those unable to register online. For the 2011 National AAZK Conference, SD AAZK is using Eventbrite as its registration source. When you go to register at www.sdaazk.org you will be linked to our Eventbrite site. All conference events, such as Pre & Post Conference Trips, Zoo Day Behind-The-Scenes (BTS) locations and times, and San Diego Zoo's Safari Park special events, will be offered online through our Eventbrite link for sign-up at the time of registration. Please read all the categories when you go to register. Therefore those who register early will have first choices as to areas they would like to visit.

Prices

Full week registration:

Members: \$200 (includes all paper sessions, Icebreaker, Zoo Day, Awards lunch/dinner, T-shirt)

Non-members: \$275 (includes all paper sessions, Icebreaker, Zoo Day, Awards lunch/dinner, T-shirt)

NOTE: Full registrations may be transferred among different individuals on different days if desired, but only one conference packet with one conference badge will be issued per registration. If conference registration is purchased for a group, cost will be dependent on group's AAZK membership status and will state group's name. Only individuals wearing a conference badge will be able to enter the conference area.

Daily Registration: \$75

Banquet only: \$100

Icebreaker only: \$75

Conference T-shirt: \$15

There will be an increase in cost for registration after July 13, 2011.

Late Full Registration Fee for Members: \$275

Late Full Registration Fee for Non-Members: \$350

Late Daily Registration Fee: \$85

Program

Our SDAAZK Board is extremely excited to announce that our keynote speakers will be Joan Embery and Julie Scardina. Joan Embery has served as a champion of environmental and conservation issues around the world. Julie Scardina is an Animal Ambassador for Sea World and Busch Gardens and has shared her love of animals and commitment to wildlife conservation with people across the nation. For more information on our terrific keynote speakers, please visit our website.

Icebreaker

We are thrilled to hold the Icebreaker at the San Diego Zoo Safari Park. We will offer a limited number of tours at a very reasonable price.

Zoo Day

Conference delegates will have all day to explore the World Famous San Diego Zoo! Zoo Day will include a free breakfast and lunch, Behind-the-Scenes tours, Open Houses, and special presentations. Special visits in various areas will be available on a first-come, first-served basis, dependent upon when you register for the conference. You will even receive a discount on merchandise and food throughout the Zoo!!!

Exhibitor Information

We will have exhibitor tables available during the duration of the conference. Exhibitor tables will be located in the Westin Gaslamp Quarter Hotel in a highly visible area. There will be a limited number of tables available so be sure to reserve yours soon.

Exhibitor rates are as follows:

AAZK Members: \$100

AAZK Non-members: \$200

Conservation Groups: \$ 50

Note: Additional fees may apply.

Chapter Challenge

Don't miss out on this opportunity to get involved with the Chapter Challenge! How would you like to win a free registration or a registration in addition to a shared double room?? Do you want to support the general conference budget to help make this gathering spectacular? Visit our website for more details (www.sdaazk.org)!

Accommodations

Hotel registration at our special conference rate is available NOW!

The Westin is located in San Diego's historic Gaslamp Quarter, featuring fine shopping, restaurants, entertainment, and culture. The Westin Gaslamp Quarter offers a unique location with the exhilarating excitement of the city at our doorstep. Because of the Westin's central location, it is an easy to use our public transportation system. Conference delegates will be able to access public transportation to many of San Diego's main attractions, including the San Diego Zoo, SeaWorld, Scripps Birch Aquarium, and our beautiful beaches. Conference delegates will also enjoy the Westin's hospitality, and the environment will appreciate their green policies.

Conference Room Rate : \$159 per night. The hotel has a limited number of double rooms available; if you need two double beds in the room, please book early, and let the hotel know you'd like a double room.

Room rate: Single – \$159, Double – \$159, Each additional person \$20

Hotel rate is available until August 2, 2011

Transportation

By air: Conference delegates should fly into the San Diego International Airport (SAN). Bus from Airport to Westin Gaslamp Hotel, Route # 922: Use San Diego's Metropolitan Transit System (www.sdmts.com) for \$2.25 (exact fare required) from the airport to the hotel as your cheapest and greenest way to arrive. Route #992 takes 15 minutes and leaves from in front of the airport every 13 minutes. Tell your driver your destination is the Westin Gaslamp Hotel at Horton Plaza. Once you exit the bus on Broadway Avenue, the hotel is on that same side.

LOOKING FOR SPONSORS!

Have you considered getting involved by becoming a sponsor of the 2011 National AAZK Conference in San Diego? Now's the time to support a great organization and be seen among animal care professionals from around the world.

Contact Conference Co-Chair, Matt Akel at matthewakel@att.net for more information on how to help make a difference.

Be sure to visit www.sdaazk.org for continual updates regarding the conference.

Don't forget to visit us at Facebook and Twitter via our webpage.

Great News: AZA Animal Care Manuals

In order to promote excellence in animal care and welfare, AZA and the Animal Welfare Committee (AWC) have graciously allowed all interested animal care professionals to access the newly completed animal care manuals without a member login. To access these manuals, go to: [www.aza.org>animal care management> animal care manuals](http://www.aza.org>animal%20care%20management%20animal%20care%20manuals). Scroll down to “Completed Animal Care Manuals” and click on one of the following:

- Andean Condor
- Chimpanzee
- Kori Bustard
- Mustelid
- Polar Bear
- Procyonids
- River Otter
- Viverrid

These Animal Care Manuals (ACMs) provide a comprehensive compilation of animal care and management knowledge that has been gained from recognized species experts, including the AZA Taxon Advisory Groups (TAGs), Species Survival Plan® Programs (SSPs), biologists, veterinarians, nutritionists, reproduction physiologists, behaviorists and researchers. Each manual assembles basic requirements, best practices, and animal care recommendations, improving upon and eventually replacing any pre-existing Husbandry Manuals. The TAGs and SSPs are currently engaged in transferring the relevant information from the Husbandry Manuals into the Animal Care Manual format. There are approximately 170 proposed manuals, with a number near completion and in the final stages of review. This is obviously an enormous task and could not be completed without the dedication and collaboration of countless individuals working diligently toward such a beneficial project.

For those of you who don't know much about the AWC, it is a committee established to foster an understanding of what welfare is, to continually improve the welfare of all animals in our care by ensuring it stays a top priority in AZA institutions, and to be proactive advocates of welfare issues beyond the zoo gates. They are here to assist you in improving the welfare of animals in your care in any way possible, including the formation of an Animal Welfare Committee within your own institution. Dawn Neptune, the Behavioral Programs Coordinator at Utah's Hogle Zoo, currently serves as an advisor and the national AAZK liaison to the AWC and can serve as a resource in this regard (email 2enrichntrain@hoglezoo.org)

Current AWC objectives include:

- Identifying and encouraging the development of animal welfare research projects and assessment tools
- Educating and engaging AZA zoos and aquariums in applying welfare assessment tools
- Driving the creation of Animal Care Manuals for all taxa
- Proactively identify and address internal and external animal welfare issues not addressed in the Animal Care Manuals
- Understand and influence public perception about animal welfare in AZA zoos and aquariums

AAZK would like to thank the AZA and the AWC for making this happen.

Now available as a pdf

A Pocket Guide to Kansas Snakes, 3rd Edition

By Joseph T. Collins & Suzanne L. Collins

Photographs by Suzanne L. Collins and Bob Gress

Published by the Friends of the Great Plains Nature Center (Wichita). Sponsored by the Kansas Department of Wildlife & Parks (Pratt), Westar Energy (Topeka), The Center for North American Herpetology (Lawrence), and the Great Plains Nature Center (Wichita).

Resource of Interest.....

This pocket guide covers the 38 kinds of snakes found in Kansas, all illustrated with exquisite color images. Pocket guides are an important way to get people involved with wildlife conservation, because the more people become familiar with a group of animals, the more they have invested in them and their habitat. In this guide, Joe and Suzanne Collins reveal the abundant serpent fauna of the Sunflower State, with sections on size, description, and habits.

Contains information on all Kansas serpents and organizes them in the Family Leptotyphlopidae (Slender Blind Snakes), Family Colubridae (Harmless Egg-laying Snakes), Family Dipsadidae (Harmless Rear-fanged Snakes), Family Natricidae (Harmless Live-bearing Snakes), and Family Crotalidae (Pitvipers).

New features: Taxonomy remains generally unchanged except that the Family Xenodontidae is synonymized with the Family Dipsadidae (resulting in both Hognose Snakes being placed in the Family Dipsadidae), the generic name of the New Mexico Blind Snake is now *Rena* instead of *Leptotyphlops*, and the Speckled Kingsnake is recognized as a distinct species, *Lampropeltis holbrookii*.

For greater accuracy, comprehension, and ease of use, this book has adopted the long-standing, traditional, standard common names for North American herpetofauna maintained by CNAH, published by Collins & Taggart (2009), and recently adopted in the new book, *Amphibians, Reptiles, and Turtles in Kansas*, by Joseph T. Collins, Suzanne L. Collins, and Travis W. Taggart (2010 Eagle Mountain Publishing).

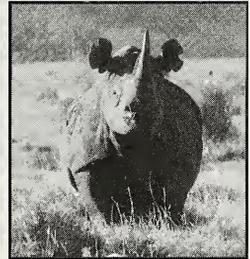
Date of Publication: July 2010
69 pages, softbound

To download a free copy of this booklet, go to
http://www.cnah.org/cnah_pdf.asp

Source: The Center for North American Herpetology, Lawrence, Kansas ~ <http://www.cnah.org> 10/25/10

Safari to Kenya

Interested in visiting Lewa Wildlife Conservancy in Kenya with a zoo group? We have a few spots open on our March 12-24, 2012 trip. We are accepting zoo staff, volunteers and their travel companions. Please visit: <http://www.lewa.org> or <http://members.cox.net/lwcsafari>.



Total cost will be about \$5000 per person depending on the cost of the flight at the time we book. This includes round trip (RT) airfare to Nairobi, RT flights directly into Lewa, transfer fees, 8 nights at the Lewa safari camp (luxury camping including showers/bathrooms within each tent), 2 nights at Il Ngwesi, and one night at Joy's Camp in Shaba National Reserve, daily conservancy fees, all meals and non-alcoholic drinks, and game drives. Tips (about \$100/person for entire stay) and alcohol are not included. Optional activities such as camel/horseback rides are not included. Rates are based on double occupancy (but we can work on pairing you up if you don't want to pay extra as a single). They also have triples. Maximum number is 14 for the trip including the leader.

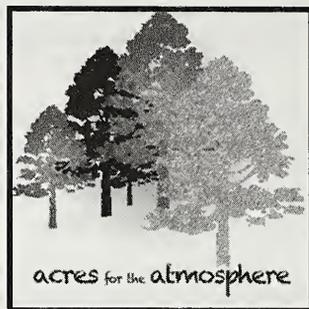
Denise Wagner and Dawn Neptune will be co-leading this trip to Lewa. An optional extension to the Masai Mara is available as space allows. These trips fill quickly so email Denise Wagner at lwcsafari@cox.net ASAP if interested.

AAZK Grant Report.....

By Marissa Krouse, Keeper I
North Carolina Zoo, Asheboro, NC

CPR Grant Report 2010

We completed our first planting for the local 2010/2011 Acres for the Atmosphere campaign on October 16, 2010. The money I received from the AAZK CPR grant aided in the purchase of 122 trees that were planted at Clay Presnell Park in Seagrove, North Carolina. More specifically, the funds from the CPR grant purchased Red Oaks, Dogwoods, and Smoke Trees from the local nursery, Gilmore Plant and Bulb Co., Inc. In addition, we also planted Chaste trees, Black Gum, Maples, Red Buds, and several Indian Hawthorns and Hollies. The large sizes of these trees (up to 10 ft. tall) served as instant gratification for the Seagrove community as it drastically improved the curb appeal of the park and starting sequestering excess CO₂ from the atmosphere immediately!



This local park was in need of new greenery to add life and shade for its visitors. The trees were planted



Volunteers from a number of organizations spent the day planting trees in Clay Presnell Park in Seagrove, NC

around the existing walking trail, near the picnic area, and around the ball fields. We also planted several shrubs around the park's sign to potentially draw in more visitors. With the help of 75 volunteers from Trees NC, NC Zoo, Trees Seagrove, Seagrove Elementary School, Asheboro High School Zoo School, Asheboro High School International Club, Carolina Bats, and the NC Zoo Society, we were able to finish the planting that same day. We planted honorary trees for the students from Seagrove Elementary School who

participated in a poster contest that depicted how trees combat global warming. We finished up the day with a picnic and educational displays on polar bears and climate change.

There was media coverage of the planting event from the feature story in the local Asheboro newspaper, The Courier Tribune. It is posted online at:

http://www.courier-tribune.com/news/story/2010/10/18/volunteers_plant_130_trees_seagrove_park



The "Before" and "After" photos above shows the improvement made at the H. Clay Presnell Memorial Park through the efforts of the Acres for the Atmosphere Project.

(Editor's Note: Information on the Conservation, Preservation & Restoration Grant (CPR) as well as other grants offered to AAZK members may be found on the Association's website at www.aazk.org. Look Under "About Us" on the homepage and then click on "Grants". Other grants offered by AAZK are: The AAZK Professional Travel Grant, The AAZK/AZA Advances in Animal Keeping Course Grant, and The AAZK Research Grant. Qualification/criteria for each grant and information on the application process can be found in the Member's Only section of the website. You must register an account in the Member's Only section (and be a current AAZK member) in order to access this area.)

Deadline for 2011 grant applications is 1 March 2011

Big Cat Internships Available

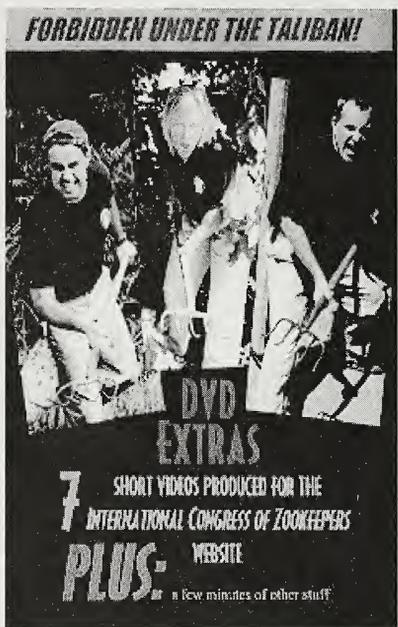
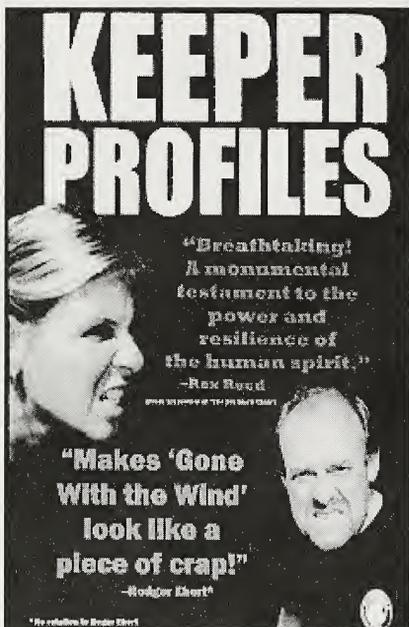
Join us in
"Saving Tigers One by One"

As seen on Animal Planet®
"Growing Up Tiger"
 Apply at: www.tigercreek.org



Learn about Big Cat Management. Internship involves Animal Care Apprentice and Public Education. We offer experience that counts towards employment.

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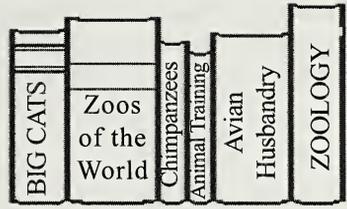


**You've Heard About It!
You've been looking for it!
Here it is!**

Keeper Profiles - The hilarious DVD that combines the original film clips that dissect the personalities of your fellow keepers with outtakes and other footage. Produced by the Southern Ontario AAZK Chapter, all profits from the sale of this DVD go to support AAZK, Inc. and its projects and programs.

\$15.00 U.S. and Canada
(includes shipping and handling)
\$17.00 International
(includes shipping and handling)

Order from the AAZK website at www.aazk.org (under Shop on the homepage) OR purchase with Visa or Mastercard by calling the AAZK Administrative Offices at 785-273-9149.



Standard Common and Current Scientific Names for North American Amphibians, Turtles, Reptiles and Crocodylians. Sixth Edition (2009)

By Joseph T. Collins and Travis W. Taggart

Publisher: The Center for North American Herpetology (CNAH), Lawrence, Kansas

<http://www.cnah.org>

The first edition of this authoritative compilation, published in 1978, listed 454 species of amphibians, turtles, reptiles, and crocodylians, and was quickly adopted nationwide as a source for common names for these North American (north of Mexico) animals, names that could be consistently used worldwide to avoid confusion, both in spelling and during conversation.

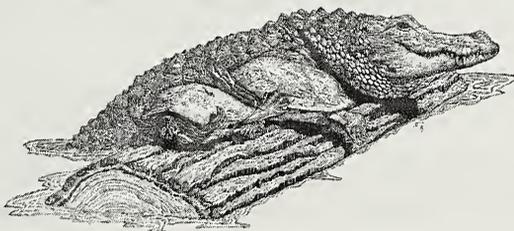
This sixth edition, published in printed form on 5 April 2009, lists 621 species of amphibians, turtles, reptiles, and crocodylians in the United States and Canada, an increase of 167 species (27%) since 1978 and an increase of 232 species (37%) since 1956, which demonstrates clearly how much the diversity of these animals in North America was previously underestimated.

The standard common names in the fourth edition (1997) of this list were used exclusively in the well-known "Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America" (third edition expanded, 1998, Houghton Mifflin Co., Boston), were adopted exclusively in the "The Frogs and Toads of North America" (recently published by Houghton Mifflin; Elliott et al. 2009) and will be adopted for the forthcoming fourth edition of the Peterson Field Guide, which has the widest distribution of any book ever written about these creatures.

The pdf version of this sixth edition has been updated since the print version was issued on 5 April 2009 (thus far, over 2,200 copies of this latest edition have been requested and/or mailed worldwide). We anticipate that the next (seventh) edition of this list will be published in 2014.

The CNAH web site, which is the largest academic herpetological web site in the world, has adopted the common and scientific names of this sixth edition. The CNAH web site has had over 920,000 visitors since it was launched on 1 January 1998, and recorded over 1,000,000 hits in calendar 2010 alone.

The latest pdf version of remains available gratis online at: http://www.cnah.org/cnah_pdf.asp



American Alligator

Arist. Debi Talbot

Training Tales...



Training Tips: When Maintenance Doesn't Require a Work Order

By

*Jason Pratte, Behavioral Husbandry Manager, Omaha's Henry Doorly Zoo
and Kim Kezer, Animal Training Advisor, Zoo New England
AAZK Behavioral Husbandry Committee Members*

A common question asked by new trainers is, "when do I consider a behavior I'm teaching an animal to be established and ready to be turned over to other trainers for maintenance?" The answer is highly situational, due to the unlimited combination of trainers, animals and environments. There is no one set of circumstances that outlines exactly when a newly established behavior can be turned over to others. This paper is written to provide insight and approaches on how to integrate additional trainers in maintaining an established behavior.

But first, we need to back up a few steps. The initial question assumes that there was a primary trainer for the animal or the behavior. The benefit of having one person train a new behavior is that the expectations remain consistent. The animal learns the cue from one trainer, who will deliver the cue the same way each time and maintain the same behavioral criteria for the animal to earn a reward. Once a primary trainer has been working on a new behavior for a period of time, they will need to determine if this in-progress behavior is now established. They feel confident that they can turn this behavior over to coworkers to assist with its maintenance. Some simple questions that might aid in assessing the readiness of the behavior for maintenance are:

- Does the animal respond to the cue >80% of the time from the primary trainer?
- Is there any confusion with other cues that may be similar?
- Will the animal respond consistently to the cue in various locations or at different times?
- Do they reliably respond to the cue when another person or trainer is present during a session?

These are a few examples, but by thoroughly examining the criteria for the cue and the behavior it will be easier to determine when a new trainer can be integrated into the program.

Once we have determined that a behavior is ready for maintenance, what kind of schedule should it be on?

So how often should a trainer ask for a maintenance behavior? It is important that these behaviors be inserted regularly in sessions. The frequency of the behaviors will be determined by the complexity of the behavior.

Is it a simple behavior, like asking the animal to target, or present a paw? Then cue the maintenance behavior regularly. Established behaviors are always an excellent fall back if a session is frustrating or not progressing well. The animal knows what to do and can quickly earn a reward for performing a routine behavior. You can get back on track with renewed confidence.

Is it a more complex behavior? For medical or invasive behaviors (e.g., injections, blood draws), confer with managers and vet staff to determine the maximum number of times they would want that behavior done within a time frame (for example, no more than one saline injection every two weeks in a specific site). Then plan sessions accordingly, coordinating your efforts with other trainers through training logs and personal communications. The goal is to maintain the transferred behaviors at a consistent level of execution, but not to inadvertently cause physical or psychological stress by engaging in invasive procedures too often. Work with the team to balance the training goals with the animal's welfare.

How do you transfer an established behavior over to another trainer?

Here are some suggestions for steps to transfer a behavior to new trainers for maintenance:

1. The primary trainer provides a detailed explanation of the cue and the behavioral criteria for the animal to receive a reward. These details can be written down, photographed, or even captured on video. This clear communication may minimize the opportunity for the animals to cheat, develop superstitious behaviors, and prevent cue drift (when a cue starts to look different between trainers over time).
2. New trainers should review training logs and behavioral shaping plans to understand the goals & processes, and formulate any questions.
3. New trainers should observe as many sessions as possible. Set a number ahead of time, perhaps based on the complexity of the behavior (i.e., 5 sessions for something simple, 10 sessions observed for a complex or invasive procedures). Record these in the training log.
4. The new trainer starts to establish a positive relationship with the animal by feeding them and spending time in proximity.
5. The primary trainer demonstrates and explains the behavioral cues. The new trainer gives cue to the primary trainer to ensure accuracy.
6. The new trainer cues the animal for the established behavior while primary trainer observes. Set a number of sessions based on the similar parameters to those in step #3. Log these as well.
7. After the primary trainer is confident that the behavior is cued and executed correctly, the new trainer can then incorporate it into their own sessions and record this in training logs.

There should be constant verbal and written communication between trainers throughout the process. If issues arise with any of the trainers that cue a specific maintenance behavior, compare notes and see if there is a detail missing or something one person is doing differently from another. Do not be afraid to ask for advice or assistance. Remember, the important part of the process is consistent messaging and expectations for the animal.



Both trainers should work together during the integration process to ensure consistency.

(Photo: Henry Doorly Zoo, Jay Pratte)

What is the importance of other trainers maintaining behaviors?

It is a lot of work to integrate other trainers to maintain behaviors. Why bother? Why not just have primary trainers focus on their specific behaviors with each animal? The main reason is the zoo community is very fluid in staffing. People move to a new facility, take vacations, go on maternity leave, rotate to other areas in the zoo, or take an unexpected leave of absence. It is not always possible that the primary trainer will be available to ask the animal to perform a specific behavior when it's needed. So involving other trainers in behavior maintenance ensures that under any given circumstance, there will be staff capable of cueing the desired behavior.

Having multiple trainers also means that the behaviors are being asked for more often, giving the animal more chances to remember them and be rewarded. Transferring maintenance behaviors to new people also builds team communication skills, and allows everyone input on future training goals. It can also benefit the team by illuminating gaps in communication. All of these results will produce a more rewarding and consistent environment for the trainers, which ultimately benefits the animals in our care.

Chance to Win Free Conference 2011 Registration Offered

Get your training and enrichment articles into the Enrichment Options & Training Tails Column editors to be considered for a complementary registration to the 2011 AAZK National Conference in San Diego.

The AAZK Behavioral Husbandry Committee will choose one article from those published between July 2010 through May 2011 in the *Animal Keepers' Forum* Enrichment Options or Training Tails columns to be awarded a FREE 2011 conference registration.

The winning author will be notified by June 2011. Only one gratis conference registration will be awarded no matter how many authors are on the paper – designation of which author of a multiple author paper is to receive the free registration is not the responsibility of AAZK or the AAZK Behavioral Husbandry Committee. The winning registration is non-transferable and has no cash value, so if the chosen author is unable to utilize the free registration another author will be selected by the Committee.

Email your articles to: akfeditor@zk.kscoxmail.com. Submissions should be submitted in MS Word only. Photos should be 300 dpi jpgs or tifs attached to the email. Be sure to include proper photos credit for each photo and suggested captions are appreciated.

Submit now for your chance to win a free Conference 2011 Registration!

Attention AAZK Members!

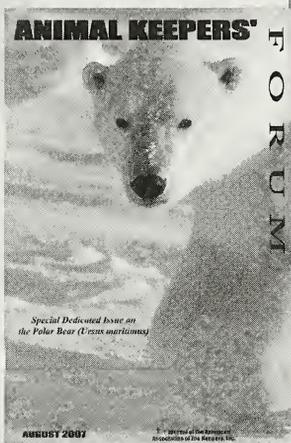
AKF Dedicated Issue Combo Pack Sale

Get a combo pack of all five dedicated issues of the *Animal Keepers' Forum* for just \$30 if you are a current AAZK member. Non-member price for the Combo Pack is \$60. You'll get issues on: Care and Management of Geriatric Animals [2009], Crisis Management, [2007], Polar Bears [2007], Cheetahs [2005], and Avian Husbandry [2010]. That's a savings of 40% over buying the issues individually. These are great issues so purchase your Combo Pack today. Orders from Canada and overseas require an additional \$10 in shipping. Domestic orders include shipping cost.

You may order this Combo Pack for a limited time by going to the AAZK website at www.aazk.org. Click on "Shop" from the homepage. Or you may order by calling the AAZK Administrative Office at 785-273-9149 for purchases with a Mastercard or Visa.

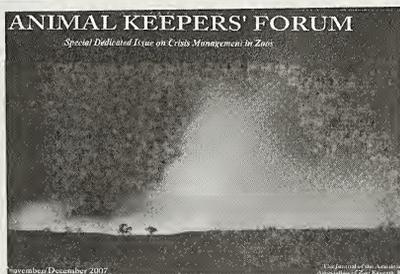
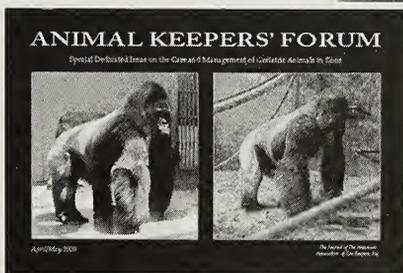


You don't want to miss these information-filled issues!



Go to www.aazk.org to order!

Limited Time Offer! Act NOW!





A Catalyst for Conservation

Devastating News from Lewa

The recent news from Lewa in Kenya about another rhino poaching on October 30th, 2010 is certainly devastating news. When I heard this, first it sickened me. Then I think, what more can we do? The answer, I am afraid is more security which means more money. Poachers don't care that our economy hasn't recovered as quickly as we'd hoped. In fact, when our economy is bad, poaching pressure goes up as less money comes in from tourism and poaching becomes more enticing. It is going to be tougher than ever with our economy to raise more money for *Bowling For Rhinos* so security can be increased. But it **MUST** be done!

We need everyone to pull together this year and work harder than ever with a goal of doubling the amount each AAZK Chapter brought in last year. A lofty goal but one I KNOW we can accomplish. Some ideas to help double your money:

- Have an AAZK meeting this month dedicated to brainstorming on ways to increase the success of your event.
- Start early. Now is the time to get that committee formed, the date set and get working.
- Notify past bowlers of your event date so you build your event numbers rather than start over each year.
- Seek help from your zoo professional event planners, graphics people, etc.
- Keep costs down. The only way to do this is to start early and seek donations. Negotiate with the event hosts to see if they will donate lanes. This might take months to seek the ok from a corporate office. Same with t-shirt and food costs.
- Build a relationship with the bowling alley owners by possibly offering a behind-the-scenes tour at the zoo. Once a relationship is built, the chances of getting lanes for less goes up.
- Advertise your event early in every free location like in your zoo flyers, newsletters, Facebook®, etc.
- Have more than one event. Try a kid-friendly Saturday bowling event and then an Evening Event that more of the zoo staff/family and friends can attend. Or Try a "Wii for Rhinos" and a "Rummage for Rhinos" event. Advertise the second event at the first event.
- Start early seeking donations for auction items/raffle items, etc. Remember to spread the news as there are many people connected to the zoo who have companies that will donate items or talents such as paintings, etc.
- Ask local celebrities (radio station, tv stations) to attend your event and bowl with you. This gets free advertising as they will talk about the upcoming event.
- Ask local Boy Scout or Girl Scout troops to join your event.
- Notify your local Chamber of Commerce of your event.
- Seek the help of your zoo volunteers or docents. Hold a meeting for volunteers to let them know how they can help at your event or join your event. And ask them to bring friends!
- Invite your administrative staff to form teams to come out and bowl.
- Be sure to personally invite your Zoo Director to your event.
- Ask your Human Resource Department if they will allow the top three money raisers from your event (or top team) to have a FREE day off work!
- Seek other incentives to increase the money each person collects on their sponsor forms.
- Have different levels of door prizes: Those with over \$300 collected, \$100, etc. Advertise this ahead of time so there is incentive to collect more money.
- ASK each person who registers to collect at least \$50 in sponsors before the day of the event.
- See <http://aazkbfr.org> for more ideas and please send me your Chapter's contact info for your event ASAP: Patty Pearthree at: ppear3@pear3.org.

We **CAN** double the amount raised. It will take work but we are an organization with a passion for animals and your dedication is unlimited!



Poachers Claim Second Rhino at Lewa Wildlife Conservancy

For the second time in the history of the Lewa Wildlife Conservancy, we face the difficult task of sharing some devastating news with you. On Saturday, October 30th, in the early hours before dawn, a group of poachers came onto the Conservancy and killed one of our female black rhinos. Her horns were taken and the poachers managed to escape.

At 3:45am gunshots were heard on the western boundary of the Conservancy, which were instantly reported to our ops room by a security outpost close by. Tracker dogs and KPR teams were immediately deployed to the area. As morning light came, the tracks of four men were found coming from within the Conservancy. Our worst fears were realized when a freshly shot rhino carcass was found – the horns hacked off. Road blocks were immediately put in place, and the poacher's tracks followed into Ngare Ndare village, where the scent was lost. Critical information has since been gathered by our teams, with the support of the Kenya Wildlife Service.



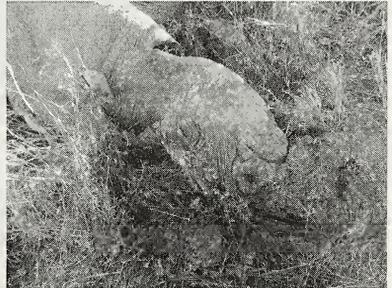
Stumpy and one of her calves.
(Photo courtesy of Lewa Wildlife Conservancy)

Aged at least 41, Stumpy was Lewa's oldest female black rhino and one of the Conservancy's founding rhinos in 1984. She gave birth to eight healthy calves during her long tenure on Lewa – the most recent only 1½ years ago, surprising everyone by giving birth again at such an old age. Her calf was also injured in the attack, and has suffered a minor wound to the neck, but is otherwise healthy. He is being monitored carefully on a daily basis by our rhino patrol units.

The investigation is ongoing, and our security team is following some strong leads, but arrests have yet to be made. Whilst we have enhanced our training regimes since the incident in late 2009, and increased the number of security outposts, we are acutely aware that Lewa's boundaries are porous,

and that several public roads traverse the Conservancy. We do all we can to provide an effective deterrent by maintaining the high profile of our security teams, by the very nature of our response to such incidents, by our strong positive relationship with local communities, and by sustaining intelligence networks. But we are conscious that we can never fully eliminate the risk involved in hosting rhino.

This latest loss is a devastating blow to Lewa's conservation efforts. But in a country and on a continent that is being overwhelmed by rhino poaching (South Africa is currently losing rhinos to poaching at a rate of one a day), this incident reinforces the severity of the situation we face. We are under no illusion that we have to continue to enhance our rhino protection efforts, and will do all we can to bolster our capacity.



Stumpy was shot and her horn hacked off by poachers.

(Photo courtesy of Lewa Wildlife Conservancy)

The demand and price for rhino horn is staggering. As a result, no rhino sanctuary, not even one with the manpower and resources of the Lewa Wildlife Conservancy, is immune from poaching. But we believe that the privilege of Lewa's lead role in sustaining this remarkable endangered species is worth the risk. And we can assure you that our management team is determined to do their utmost to give rhino a future.

Although the Lewa team is devastated at this second poaching, we are pleased to be able to end on a positive note. On the same day that Stumpy was poached, a rhino was born, bringing our total population back to 117. Lewa is, and will remain, a stronghold for black and white rhino in Kenya.

Sincerely,

Richard Moller
Chief Conservation Officer Lewa Wildlife Conservancy

“Trees For You and Me” FAQ

How Is “Trees for You and Me” Tied to Polar Bears International’s Polar Bear Forest Project?

The Polar Bear Forest initiative is part of a 10-year partnership between PBI, the Wisconsin Department of Natural Resources [WDNR], and AAZK. PBI will help provide funds for reforestation on private lands and also make grants to urban communities. The project also includes an educational component to help residents make the connection between planting trees and saving polar bear habitat by reducing CO₂. The project is designed as a pilot program that can be used as a model in other states.

The AAZK is supporting the Polar Bear Forest project through their “Trees for You and Me” campaign. This fundraising initiative challenges AAZK Chapters to see who can raise the most money for the tree-planting effort. Last year [2010] the AAZK raised more than \$10,000. The Brookfield Zoo was the winning Chapter, with a total of \$3,135. This resulted in 120 trees planted in Okaloacoochie State Forest in Florida; 3,401 trees in Boys Colony State Forest in Alabama; and 6,866 trees planted in Mackinaw State Forest in Michigan.

Where Does the Planting Occur?

This year’s fundraising efforts [2011] will go towards two plantings for the Polar Bear Forest initiative, with projects that highlight urban forestry and county forests on publically owned and managed lands. It includes two main sites:

City of Sparta, Wisconsin

The primary goal of this project is to plant a diverse mixture of 1.5” caliper saplings before Emerald Ash Borer infestations destroy the city’s tree canopy. This project has a strong educational component. The proposal includes working with the local school’s Earth Club, the county extension office, and Master Gardeners. City residents and homeowners plan to be engaged in watering and mulching the project trees adjacent to their homes. The hope is this will inspire individuals to plant additional trees on their own personal property. The community is willing to develop and place signage in their city parks highlighting the donor.

Another important element of this project is the potential for broad marketing of Tree Planting for Climate Change within urban forestry networks in Wisconsin and across the U.S. This will mainly be handled through presentations at conferences and articles in newsletters that are distributed to all states.

Juneau County Forest

The second site is 33 acres in the Juneau County Forest. The proposal is to plant a mix of red pine and white pine at a density of 900-1,000 seedlings per acre.

Is There Tree Planting Elsewhere? Why Not?

The Polar Bear Forest project in Wisconsin was designed as a pilot program that can later be used as a model in other states. The Wisconsin Department of Natural Resources’ Forestry Division provides support to make the project successful, including preparing the site for optimal planting conditions, labor costs, and most important, follow-up maintenance. Polar Bear Forests are managed in conjunction with surrounding state forest lands, using sustainable forestry practices that meet Sustainable Forest Initiative and Forest Stewardship Council certification standards. This on-going management insures the investment of planting a seedling will successfully result in growing a mature tree. Every dollar goes directly to tree-planting and the WDNR donates their expertise in forest management.

The initial planting for the Polar Bear Forest project was funded by PBI, with 26 acres planted in Kettle Moraine State Forest in Wisconsin in the spring of 2010, followed by nine additional acres at a nearby site.

How Are the Finances Managed?

PBI donates the management of the funds and reporting to AAZK. This way, no administrative costs are attached and every dollar directly supports tree-planting efforts.

We Wish There Was a Local Project, How Can We Do One?

A related zookeeper initiative, Acres for the Atmosphere, is a “roll up your sleeves” tree-planting and educational effort involving AAZK Chapters, North American zoos, and PBI Arctic Ambassador Centers. This initiative was started by graduates of the 2009 PBI Keeper Leadership Camp. Through this initiative, individual zoos organize tree-planting days in their communities. See <http://www.polarbearsinternational.org/programs/acres-atmosphere-model-communities>

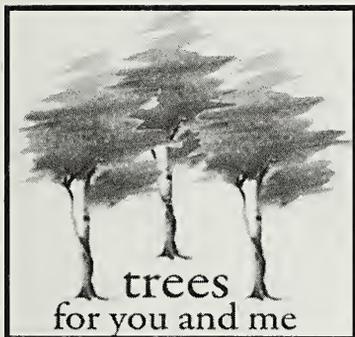
How Does Planting Trees Help Polar Bears?

Trees act as “carbon sinks” that absorb CO₂ from the air. They store this carbon in roots, trunks, stems, and leaves while they grow and in wood products after they’re harvested.

Reducing the build-up of carbon in the atmosphere is necessary to reverse climate change. Polar bears depend on the sea ice to hunt, breed, and in some cases to den. Less carbon in the atmosphere means better conditions to retain arctic sea ice and improve polar bear habitat and survival.

By supporting the Trees for You and Me and Polar Bear Forest initiatives, you can help ensure a brighter future for the bears.

.....from “Trees for You and Me” Coordinator Christy Mazrimas-Ott



I want to welcome all AAZK Chapters to the 2nd Annual “Trees for You and Me” AAZK Chapter Challenge that will run from 1 September 2010 - 1 March 2011. This year the link to “Trees” will be on Polar Bears International (PBI) website. We will be helping to build the Polar Bear Forest in Wisconsin with the help of the Wisconsin Department of Natural Resources (WDNR). This year for each \$1 donated three trees will be planted in the Polar Bear Forest. The winning AAZK Chapter will again have a tree planted in their zoo or community thanks to PBI along with a plaque. “Trees” is a true collaboration between PBI, WDNR, and AAZK to plant trees, reduce CO₂ and help polar bears!

PBI’s link for “Trees for You and Me” to donate is below; don’t forget to find your AAZK Chapter on the scroll and click to win.

<http://www.polarbearsinternational.org/programs/trees-you-and-me-model-nation>

AAZK’s link to AAZK/PBI and reforestation

<http://aazk.org/aazk-and-polar-bears-international/>

Any questions or comments contact christy.mazrimas-ott@aazk.org



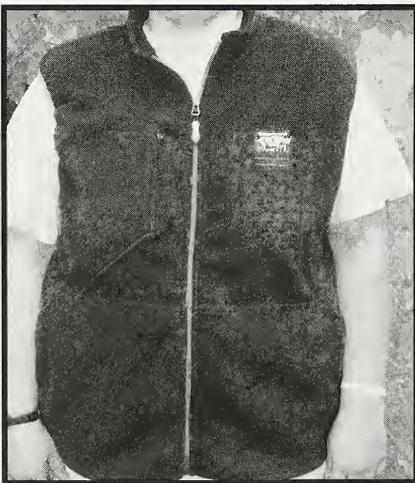
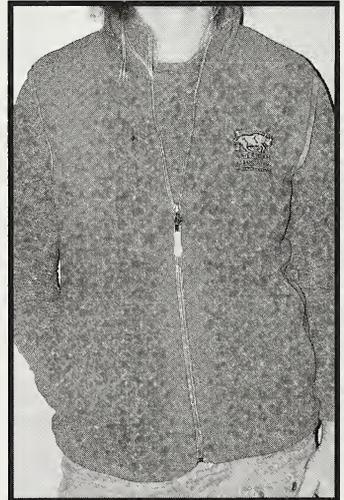
Debuting New AAZK Logo Fleece Vests

With the exception of duct tape, nothing is more versatile than a fleece vest. These vests are functional, comfortable and stylish. Use them as a layer to keep your body core warm or as an outer layer on cool spring or fall nights out. Men's and women's cut made of 80% recycled polyester with breast and front pockets, full zipper, collar, and detail trim.

Available in women's sizes XS-XL in red, cream, lime green, and black. Available in men's sizes XS-XXL in black, navy, and red. Full color AAZK logo on black and navy colors, grey scale logo on other colors. Very limited number of sizes, so place your order today!

See on AAZK website (www.aazk.org) under "SHOP" for color view of the vests, pricing, and to place your order.

Photos (clockwise): Women's Red Vest, Women's Cream Vest, and Men's Black Vest.



REACTIONS

A Question and Answer Forum for the Zoo Professional on Crisis Management

By William K. Baker, Jr., Curator
In-Sync Exotics Wildlife Rescue & Educational Center,
Wylie, TX



Question

Our facility is working on a new exhibit, what types of primary containment are available?

Comments

When I'm asked for recommendations on primary containment fencing, it is truly a situational question. First, it all depends on what you are trying to hold and how much money you're willing to spend on your primary containment. The answer will also be dictated by whether or not you are designing an exhibit that is for holding purposes, a traditional zoo setting, sanctuary or refuge, private owner, or even a wildlife park, which will require extensive fencing for pasture control and animal management.

The proviso is that whatever will be used must be adequate to contain the species in question without presenting a clear and present danger to the animal, other animals, or members of the public. Translation, the containment chosen must be of quality construction and of a sufficient gauge or strength to hold the animal under all potential conditions, which in retrospect is pursuant to both industry and USDA standards.

The most common style of containment in use today is some type of mesh. It's normally a specific style and either galvanized, powder-coated, or stainless. I should mention that there are numerous facilities that have successfully used chain link style galvanized fencing for many years with no problems. Still, I do not generally recommend chain link fencing as a general rule. The reason is that once it is breached it can begin to unravel. Normally what I try to do instead is to utilize either a ranch or zoological supplier for mesh. The best resource in my experience for this is in the Commercial Members section in the AZA Directory, (Association of Zoos & Aquariums) or from the AZA website: <http://www.aza.org/FindCommercialMember/>.

Mesh is available in a wide variety of fabrications, and can be had in draped form, rolled form, and welded wire panel form.

The draping form style is usually identified as a woven mesh. Good historical examples of this are Carlos® and Phantom® style meshes. They are of an extremely high quality and can really expedite construction timetables once your support poles are up and rigged for mounting. This style of netting also lends itself to creating truly novel exhibit and enclosure designs. Of the companies currently handling this style of mesh, I recommend Nets Unlimited:

Nets Unlimited, Inc.
28248 N. Tatum Blvd., B1-450, Cave Creek, AZ 85331
Phone: 480-515-1300 Website: <http://netsunlimited.com/start.html>

Personally, I prefer using galvanized welded wire mesh that has been either powder coated or vinyl coated. I have found these to have really good properties such as rigidity coupled with a certain

degree of flex in the event of animal impact. One of the best examples of this is Shepherd Mesh[®], although there are numerous companies that produce quality materials in this style including A thru Z that provides some truly advanced panel products. Priefert[®] also manufactures this style of welded mesh in a framed powder-coated panel configuration that provides good service as well and, unlike any other product on the market, can provide an instant enclosure in less than three hours set up time once the concrete slab has set and cured, which does lend itself to either crisis, quarantine, or off-exhibit holding applications.

C. E. Shepherd Co., L.P.

2221 Canada Dry Street, Houston TX 77023 USA

Phone: 713.924.4300

Website: <http://ceshepherd.com/index.html>

Priefert Mfg.

P.O. Box 1540, 2630 South Jefferson Ave.

Mount Pleasant, TX 75456

Phone: 903-572-1741

Website: <http://priefert.com/>

A thru Z Consulting and Distributing

8620 East Old Vail Rd., Tucson, AZ 85747

Phone: 520-434-8281

Website: <http://athrucages.com/index.html>

One important point - the mesh opening and gauge is usually species specific (birds, primates, hoofstock, and felids). For an example, certain smaller felids may require a 1" x 1" mesh configuration and roofing as well for species prone to climbing and leaping, (ex: Clouded leopards, margays, and ocelots).

One of the other styles that I have seen used for primary containment would be industrial piano wire. It's a really neat concept and when properly installed and maintained it fades out of the visual spectrum. The downside is that your animal care staff will likely have to walk it every day and physically check each individual wire for weakness. Of course, gunite moats and physical barriers are always a possibility for containing larger felids as well of hoofstock; it just depends on what your budget can support.

As far as fence material gauge it really depends on what you are planning to hold. Typically, I prefer using coated 2" x 4" mesh in a 10-gauge or stronger material in a vertical configuration with a supported roof. If I am using a framed panel then the supports are every ten feet and secured with turnbuckles to a concrete footer. This caging style also allows me to manage a wide variety of small and medium sized carnivores with little if any modification. However, this construction style requires a level site to execute this. Still, this would be over the top for a bird management situation that would dictate a lighter gauge and smaller enclosed mesh aperture. (Once again, the collection demographic will dictate the species specific needs.)

For attached mesh applications I drop a heavy metal support post every ten feet in a concrete encasement three feet into the ground. This style can follow land contours, but works best when concrete footers are incorporated into the design. Cantilevered supports and hot-wires are a must for open-topped exhibits to prevent climbing and jump-outs. The single best resource to date for determining your species-specific needs would be the AZA Husbandry Guidelines for Mammals, as it encompasses the combined knowledge of the zoological and wildlife profession. Another great resource for carnivores would be to check the Felid TAG website for specific recommendations and current developments: <http://www.felidtag.org>

Conclusion

It should be stated that in any given situation there will be species-specific needs that will dictate the

nature of your holding capabilities. Unfortunately a column length article restricts addressing every terrestrial species, much less the complexities of an aquatic or a marine mammal exhibit.

Next Installment (April 2011): What preparations should be taken in advance of an animal shipment and do you have specific equipment recommendations to accompany an animal shipment or rescue situation?

If you would like to submit a question for this column or have comments on previously published materials, please send them to AAZK, Inc., 3601 S.W. 29th St., Suite 133, Topeka, KS 66614 Attn: Reactions/AKF

(About the Author: Since 1985 Bill has been active in the fields of science, zoology, and wildlife management. His education and experience include a B.S. in wildlife management and post-graduate studies in zoology, Lab and Museum Assistant, Shoot Team Leader, ERT Member, Large Mammal Keeper, Senior Keeper, Curator, and Director at various zoological facilities. His area of research is crisis management in zoological institutions, which draws upon practical experience and training as a Rescue Diver, Hunter Safety Instructor, NRA Firearms Instructor, and Red Cross CPR/First Aid Instructor.)

Website SALE!!!

Be sure and check out the AAZK website every month for special sale prices on AAZK logo products, publications, clothing items and more.

**A new sale every month!
See: www.aazk.org/shop**

for special sale items each month throughout the remainder of 2010.

Visit Lewa in June 2011

I have a few spots still available for AAZK members, friends, and families for a June 13-23, 2011, zoo group visit to Lewa Conservancy. AAZK members, zoo staff, docents, and animal conservationists and enthusiasts are eligible to participate in this trip.

Total cost is estimated at about \$4500 per person, double-occupancy assumed. The actual cost may vary as the cost of overseas airfare, and transportation costs in Kenya may vary. The cost will include RT flights to Lewa, via Nairobi, transfer fees, overnight stay in Nairobi, eight (8) nights at Lewa Safari Camp, two (2) nights at the international award winning Il Ngwesi Group Ranch (operated by Masai), daily conservation fees, all meals and safari activities. Tips, optional excursions, and alcohol are not included. Total cost will be determined by trip leader and communicated to participants.

Both Safari Camp and Il Ngwesi assume double occupancy and "triples" are also available at both venues. Roommate assistance will be provided by trip leaders as required. An optional Four-day, three-night extension to Richard's Camp in the Masai Mara is available as well – June 23-26, 2011.

Larry and Betsy Clement will be trip leaders. We are veteran guides, avid wildlife photographers, and active conservationists promoting the welfare of Lewa and conservation organizations engaged in the preservation of African wildlife. The 2011 trip will be our fourth adventure to Lewa. Please visit Lewa.org and RichardsCamp.com for previews of facilities and landscape. Trip leaders are volunteers and AAZK members.



Limited spaces available – please contact Larry Clement (727-738-8882) or send email to Travel2Lewa@tampabay.rr.com for more information. Entire trip will encompass dates on or about June 10 – 28, 2011.

“It Takes a Village to Move a Bison”

By *Carrie Novosel, Senior Keeper*
Chicago Zoological Society's Brookfield Zoo
Brookfield, IL

Introduction

In January of 2010 keepers at Chicago Zoological Society's Brookfield Zoo began preparing the American bison (*Bison bison*) herd to move to the zoo's newly constructed Great Bear Wilderness exhibit. The herd consisted of 11-year-olds Becky and Drew, and 10-year-olds Ron and Judy. Additionally, two female yearling calves were going through quarantine during this time at a separate location. The bison herd was managed fairly hands-off other than shifting for cleaning and accepting some hand-fed treats at the fence line.

Keepers, along with our associate curator and behavioral husbandry manager, recognized the need for a team approach to trailer training our herd for a successful move to their new exhibit. We developed a training team specific to bison and created a list of goals before we got started on the actual training. A formal shaping plan, with a list of training steps, was developed for each goal. Some of our goals were: to station train the herd members to have better control over shifting; desensitize each bison to separate from the herd for short periods of time; desensitize the herd to shift through a barn; and, most importantly, to train each individual to voluntarily enter a trailer for transport.

Training Process

The bison were moved in a standard two-horse trailer with special modifications to accommodate this particular set-up and to protect the trailer from the bison's potential destructiveness. Animal Programs staff coordinated with the zoo's welders, carpenters, mechanics, and grounds crew to discuss both trailer set-up and safety modifications. Given the potential for the bison to damage the trailer once the doors were closed behind them, the carpenters lined the entire trailer with two layers of one-inch plywood, including the windows. A 'Dutch' door at the front of the trailer, which was part of the original trailer design, was lined in such a way that the door was still usable to call animals into the trailer. The original trailer set-up had two swinging doors on the back with a built-in ramp that folded up over the doors.

Due to safety concerns involved with closing a swinging door behind an adult bison, our welders and carpenters fit the trailer with a set of sliding doors that could be operated from outside the animal's enclosure. The door track was wider than some of the gates the trailer would be passing through so welders modified the track to fold in on itself once the doors were closed. Each door was fitted with a metal tongue along the bottom, which fit into a steel track along the bottom of the doorframe to add extra security to the door. A steel plate was also welded at the top of the doorframe to take pressure off of the door track in the event of force from inside the trailer. Once the doors were closed they were secured shut with a butterfly pin as well as a steel bar that slid across the doors and fit into a hinged receiver. A piece of steel along the midsection of each door helped guide the bar as it was slid from one side to the next, as well as adding strength and rigidity to the wood doors. Once the cross bar was fit through the receiver on each side, pins were inserted to keep it in place. The ramp could then be folded up and chained to the bar during transport.

While crews were busy modifying the trailer, keepers were busy starting the training process. Stationing the bison became first priority since it would give keepers more control of the herd before beginning other behaviors. Keepers clipped several black rubber grain pans to the chain-link fence line and began using a two-inch PVC pipe, cut vertically, as a 'chute' to pour the bison's daily grain ration into the food pan as reinforcement. At this time keepers also began ringing a cow bell at the start of each session as a cue that it was time for training and that each animal should go to a station.

The bison began responding to the sound of the cow bell within just a few days. Since we had more feeding stations set up than bison, we also began clipping visual cues (black plastic squares with a white X taped across the front) to the fence above the grain pans at the beginning of each session to mark which stations would be used that day.

One of the main obstacles the keepers had to overcome in the training process was dealing with the social interaction amongst herd members. Due to time constraints, keepers decided not to focus on a cooperative feeding strategy, but rather stationed the most dominant animals first and the most subordinate animal last. That being said, animals were only reinforced by the keeper with whom they started the session to avoid displacement. Proper timing of reinforcement was crucial to keep animals occupied and engaged during the session. This strategy was very successful, with one major drawback - it required us to have one keeper for each animal being trained, which often caused a strain on staffing.

The keepers' next goal was to begin shifting the bison from one yard to the next by passing through a two-stall barn instead of the normal shift gate. Keepers had better visual access and better control over shifting by using the barn as opposed to the shift gate. After allowing the bison a few days to acclimate to the barn, they were only allowed to shift from one yard to the other by moving through the barn. Shifting the bison through the barn helped facilitate another goal - desensitizing each bison to be separated from the herd. By combining the stationing behavior with better visual access during shifting, keepers were able to accomplish this goal in a few short weeks.



Figure 1: Training team members Amy, Roger, and Diane station the bison during a training session. (Photo: Jim Schulz, CZS staff photographer)

food pan inside the trailer and calling them from the Dutch door. Focus was placed on training the dominant animal first, then working down to the most subordinate animal. While keepers did wiggle and occasionally move the trailer doors with the animals inside, the doors were never closed while an animal was inside during training.

About one week before bison were scheduled to move to the new exhibit, the 0.2 calves were introduced to the group. The decision to do the introduction at this time was based, in large part, on the fact that keepers were more familiar with the current housing and felt better able to respond in an emergency. While the introduction went very smoothly, the introduction of the calves did have an impact on trailer training; most notably, the subordinate animals, especially Becky, refused to separate from the calves for training, or any other reason. The subordinate animals were also suddenly reluctant to shift through the barn and would only pass through a gate between the yards. Fortunately we had planned to move the two dominant animals a week before the rest of the group and those individuals continued to respond well to training. Also an unexpected plus was the fact

About two months before the bison were scheduled to move, keepers began working on the task of trailer training each bison. The process began by simply allowing the animals to have access to the trailer and feeding a portion of their hay ration inside the trailer. Within one week, each animal was observed spending time inside the trailer, though the more dominant animals were observed inside more often. During each training session keepers would station an animal in the trailer by setting up their

that the adults allowed the calves to step into the trailer with them to gain access to hay so the calves quickly became very comfortable entering the trailer.



Figure 2: Trailer training the male bison.

(Photo: Jim Schulz, CZS staff photographer)

Animal programs and veterinary staff agreed to offer each animal a mild sedative before transport. The decision to medicate was based partly on the potential for the bison to damage the trailer once contained inside, and partly on the fact that keepers felt that if an attempt to contain a bison within the trailer failed they did not have enough time to recover the behavior by the exhibit opening deadline. All herd members were given a long-acting sedative three days before transport. The adult members were also given a shorter acting drug the night before transport. (Note: Considering that the move went so

smoothly, and that each animal was so well acclimated to the trailer, Animal Programs staff do not feel that sedatives would be necessary in future transports with similar training.)

The coordinated efforts of multiple departments and team members resulted in the successful move of each animal. Keepers had to be slightly more flexible while loading the subordinate females since they were still reluctant to shift without the calves, and were still not reliable about transferring through the barn. Despite this set back, each of the herd members loaded onto the trailer voluntarily and all stayed surprisingly calm during transport. The male even re-entered the trailer after off-loading to finish his grain! A well-coordinated team approach, with open communication throughout, was critical in making this move possible.

Conclusion

Upon arrival at the new exhibit, herd members were reintroduced without incident and all quickly acclimated to their surroundings. Keepers have been able to retain the cow bell sound cue as a means of shifting the bison off-exhibit at the end of the day. Keepers also continue to utilize the stationing behavior as a means to separate the adult male and calves from the adult females so they can all receive separate diet amounts. This behavior will also be used in the future to allow keepers to weigh individual animals.



Figure 3: 1.1 bison grazing in their new exhibit *(Photo: Jim Schulz, CZS staff photographer)*

Acknowledgements

I would like to acknowledge my teammates whose coordinated efforts made this transfer possible: Tim Sullivan, Behavioral Husbandry Manager; Joan Daniels, Associate Curator; Mary Schollhamer, Area Lead Keeper; as well as Diane Gierhahn, Bill Steele, Roger Reason, Dana Vinci, and Alison LaBarge. I would also like to thank Amy Roberts, Mammal Curator/Pachyderm and Hoofstock, for being on the training team as well as encouraging and editing this paper. Finally I would like to thank staff from other departments that helped us during this process: Craig Tichelar and the welders; Scott Lundin and the carpenters; Ted Vinyard and the mechanics; Dr. Michael Adkesson and the veterinary staff; Mike Vilendrer and the grounds crew; and finally the security team.

Conservation in Your Community

By Victor Alm, Lead Keeper

Oakland Zoo

9777 Golf Links Road, Oakland, CA 94605

victor@oaklandzoo.org

Abstract

Whenever I attend animal conservation lectures at my zoo or at national conferences and workshops I often walk away feeling inspired, charged up, and ready to make a difference. I want to travel to South America, Africa, the Arctic, Asia, and many other places where this work is happening and get involved on the ground with the people who are on the front lines of global wildlife conservation efforts and field projects. However, to make my dreams come true I need to face the economic realities of getting to these places, such as the cost of flights, time off of work, as well as the costs of living and working at those projects. When you take all of that into consideration it can be a bit deflating and delay or stop you from moving forward. But why should that be? The answer is that it should not and one can continue to move forward by looking into local options.

In most regions of the country there are numerous local opportunities for keepers to put their skills to work in their own communities and make a meaningful contribution to wildlife conservation on a regular basis. This is what I chose to do in my neighborhood of the San Francisco Bay area. Having found a niche for my family and myself at a marine life hospital, rehabilitation, and research center, I have been able to use my own personal skills in captive animal husbandry (care, assessment, along with capture and restraint) to aid in their mission. Furthermore, one can take steps to help build a connection between their zoo and local conservation organizations in the avenues of informational and expertise sharing. Keepers can be a powerful force and example for conservation in the natural world and we can do so by looking not only globally but in our own backyards as well.

Introduction

Many of the top threats to wildlife on this planet tend to fall under five major categories: Invasive species, climate change, pollution, habitat change/destruction, and exploitation. When I attend conservation lectures at my own zoo, listen to talks and keynote speakers at national conferences and workshops, or speak with friends who have participated in field-based research projects that aim to learn more or tackle the above threats, I walk away feeling inspired, charged up, wanting to get involved, and make a difference for the numerous species that are at risk in the field. I want to travel abroad to South America to work with macaws, giant river otters, tapir, jaguar, and golden dart frogs. I want to visit Africa and work with hyena, elephants, cheetahs, rhinos, and painted dogs. I want to study in Asia and work with red panda, sun bear, flying fox, tigers, snow leopards and Burmese mountain tortoises. I want to find a way to get to the arctic and work with polar bear, seals, and whales.

This aim could be accomplished through many avenues from habitat and resource protection, learning more about a particular species through behavioral/natural history research, population censusing, community outreach/education and support, direct rescue and rehabilitation, or just using the unique skills acquired as an animal care professional to help out. These are my dreams and desires. However, there are economic and family realities that one must face when you make that transition between inspiration and action, such as the costs associated with work in the field (plane tickets, living in another country, fees or donations, etc.), costs associated with your career (can you get the time away from work, is your employer supportive, do you need to leave your job?), and family costs (rent or mortgage, leaving and care for your family, leaving and care for your pets, support from your family and friends). Furthermore, there is the potential environmental impact of the actual travel itself (fuel, one time use supplies, etc.). The reality of these costs can be overwhelming and can serve as a

major roadblock in terms of delaying or stopping one from moving forward, and give an excuse for remaining in the *status quo* once the inspirational high has worn off.

But why should that be? The answer is that it should not and one can continue to move forward with their conservation desires by looking locally. In the San Francisco Bay area, as in many other regions of the country, there are numerous local opportunities for keepers to put their skills to work in their own communities and make meaningful contributions to wildlife conservation on a regular basis. Through work with the western pond turtle and several marine mammals of the north pacific, I have got to do just that.

Looking Abroad or Farther Afield

I do not in any way mean to downplay the importance of field conservation work outside of my local community or out of this country. Far from it, but the economic and family realities can serve as a deterrent for many. Many of my colleagues and friends have overcome these deterrents and have had the opportunity to travel abroad or to different regions of the United States and work on field projects associated with the Oakland Zoo or their own personal interests. These projects have ranged from aiding in the recovery and rehabilitation of sunbears taken from the illegal pet trade in Borneo; aiding in the rehab and recovery of gray seals during a major outbreak of lung worm in The Netherlands; helping with the cheetah conservation fund in Namibia; assisting in behavioral and seismic detection research with elephants in Namibia; and home range and habitat use of American black bear in Virginia. Costs associated with these five cases working in the field, ranged from approximately \$1000 to \$7000 dollars. Costs associated with their careers centered on uniform support in their project of choice by all of their employers, but that support ranged from just giving the time off with no pay to allowing use of vacation and partial pay. The family costs associated with my friends and colleagues focused mainly on finding care for pets.

Looking Local or in Your Own Backyard

My path was a bit different than those mentioned above. The drive to participate with meaningful conservation work was present, but the economic realities of traveling abroad or even across the country were large. Although the Oakland Zoo, as my employer, has always been very supportive of giving time to participate in field conservation (set limits on paid time and unpaid time according to policy) the costs of getting to and staying in country along with the costs of leaving my wife, infant son, and pets for an extended period of time were too much for my budget and marriage.

After several years of riding on highs and lows associated with learning about and trying to get to field conservation projects farther afield, I changed my focus and looked in my own backyard. In my search through the numerous options in my local community of the San Francisco Bay area I found, and became involved in, two avenues of conservation that encompass my own criteria for involvement listed in the introduction. The first avenue is the population rehabilitation of the Western Pond Turtle (*Actinemys marmorata*) through the Head Start Program, which has partnered Sonoma State University with several zoos in Northern California (Oakland and San Francisco) and is based on head start programs modeled in Washington, with Woodland Park Zoo, and in Oregon, with the Oregon Zoo. Head starting is the process of raising Western Pond Turtles in a captive setting until they are large enough or past the point of being threatened by their major predators, then releasing them back into the wild (Fink et al., 2009).

Since they are listed as a species of special concern by the California Department of Fish and Game, this head starting program at Northern California Zoos fits in with the overall Western Pond Turtle conservation strategy and species studies (temperature dependent sex determination, nest fidelity, and wild diet) for the State of California (Fink et al., 2009). My specific role in the Oakland Zoo Head Start Program was to use my skills as a keeper to help head start the turtles by providing consistent and quality care of the turtles while at our facility, which is an approximate 10-month time period during each season of egg collection. In that time the turtles will have grown from hatchlings to the size of a two-year-old wild adult. This project has allowed me to use my skills as a keeper to

directly learn about and help rehabilitate the population of a declining species by releasing them back into the wild. Furthermore the costs associated with it are minimal. My employer has given me full financial support to participate in the Head Start Program (the care for turtles takes place during a normal work day), there are no travel costs or program fees associated with caring for the turtles, and I have not had to leave my family or pets to participate. In fact, there is opportunity to involve them in the project as I look into expanding my role in the program to help eight other keepers with egg collections and releases of head started turtles during a three-week period each year. The role of my family and I in this other expansion of responsibilities would be up to three days per year, and would be minimal in cost as I would only need to provide for gas money to get to the egg collection and release sites north of the city of Sonoma (a few hours drive). I would also have to provide money for food and camping equipment. All and all this expanded role would cost me about \$150 a year.

My second avenue of local conservation is through the rescue and rehabilitation of several marine mammals that inhabit the northern pacific oceans. This rescue and rehabilitation focuses mainly on the northern elephant seal (*mirounga angustirostris*), California sea lion (*Zalophus californianus*), northern fur seal (*Callorhinus ursinus*), and the pacific harbor seal (*Phoca vitulina richardsii*) through volunteer work at the Marine Mammal Center, in Sausalito, CA. The mission of the Marine Mammal Center is to recognize our interdependence with marine mammals, their importance as sentinels of the ocean environment, and our responsibility to use awareness, compassion, and intelligence to ensure their survival and the conservation of their habitat (Marine Mammal Center, 2009). This mission is accomplished by being a member of the national marine mammal stranding network as well as through a comprehensive strategy of the rescue and rehabilitation of stranded marine mammals, releasing rehabilitated animals back into their natural habitat, increasing knowledge of marine mammals through research and information sharing of results, and increasing public awareness about marine mammals and their importance through communication and education with the professional community and general public (Marine Mammal Center, 2009).

Being a volunteer in both the animal care and stranding departments for this organization has allowed me to again utilize my animal care skills to directly learn about, assess and capture stranded marine mammals, rehabilitate an animal for release back into the wild, as well as educate the general public about the threats to marine mammals and the work being done to respond to those threats. In Animal Care my duties are keeping and updating animal records, logging in and setting up new arrivals to the center (tagging, weighing, and feeding them initial meal), performing general husbandry duties (diet prep, feeding, tube feeding, and cleaning), and basic medical care (prepping medications, administering medications, and assisting my crew leader or vets) (Marine Mammal Center, 2009). I volunteer for this department once a week and the only costs are money for a basic membership along with gas and bridge toll to reach the center. There are no career costs as I am doing this on my own time, and there are no family costs, only benefits as my whole family participates with me in this endeavor.

In stranding my duties can be assessment of a stranded animal (Species, Age Class, Weight/Body Condition, Wounds/Injuries, Responsiveness, Vocalization, Behavior, Hydration Level, and Human interactions), public relations with the general public (on public beaches and trails), and rescue (a team effort) (Marine Mammal Center, 2008). I volunteer in this department once a week during work hours and the costs associated with this are gas to reach stranding sites, career costs are minimal as my employer is fully supportive of my involvement at the Marine Mammal Center and has even allowed me to participate in this department during work hours if needed. Family costs are minimal as this takes place during work hours if the need arises. All and all it probably costs my whole family around \$700 spread out through the whole year's budget to participate at the Marine Mammal Center.

How to Find Local Opportunities

Depending on where one lives finding local opportunities to participate in conservation-based field work can be plentiful or more difficult to find. To help aid anyone in their search for local based

conservation I have put together a list of resources that can help you track down a local opportunity or project in your area.

Your Own Zoo

I would recommend starting off your search with an investigation into the activities of your own zoo's conservation and education departments. Some of the projects and organizations they support through lecture opportunities along with staff or monetary contributions just might be local. Furthermore, these projects can be more likely to get institutional support for your involvement as they are most likely already in alignment with mission and goals of your zoo. This is how I found the Western Pond Turtle Head Start Program along with a variety of local speakers who are doing work in our region (California Native Bat Conservancy, California Condor Project through Ventura Wildlife Society, Bay Area Puma Project, Bear Family Program through East Bay Regional Parks, and the California Wolf Center). I ended up pursuing the Western Pond Turtle Project but there were many other options available for me to explore. Furthermore, talk to your co-workers and see what they are involved in. Perhaps one of your colleagues is involved in something local that they can introduce you to. This is how I found the Marine Mammal Center.

Wildlife Rehabbers Network

There are numerous websites out there that can plug you into the network of wildlife rehab and help you locate organizations in your area that are dedicated to rescuing, rehabilitating, and releasing wildlife. Many of these types of organizations in the San Francisco Bay Area, such as the Marine Mammal Center, Lindsay Wildlife Center, and the Ohlone Humane Society, use volunteers as the heart of their operations. Some of my favorite sources for locating rehab organizations are listed below

- The Wildlife Rehabilitors Directory (<http://www.wildliferehabbers.org>) is a website that can give you a list of permitted wildlife rehab groups by proximity of up to 250 miles from your own local area code along with a list of the most common animals they see and work with.
- Southeastern Outdoors also puts out a website (<http://www.southeasternoutdoors.com/wildlife/rehabilitators/directory-us.html>) that lists wildlife rehabbers by state. The only catch here is that groups need to register with this site to be listed so it may not have everything in your state.

University, Government, and Non-Profit Jobs

The job board website run by Texas A&M Department of Wildlife and Fisheries Sciences (<http://wfsc.tamu.edu/jobboard>) lists wildlife-based job opportunities such as full time biologists, temporary field technicians, along with master's and doctoral student opportunities. Although you might not be interested in a career change, these opportunities may lead you to projects in your area that are associated with government, non-profit, and university-sponsored projects. You never know, they might just be looking for someone to volunteer and work for free on a project related to habitat and resource protection, learning more about a particular species through behavioral/natural history research, population censusing, or community outreach/education and support.

Regional Park Systems

Your local regional park district may also be a great place to look for opportunities to get involved. Many regional parks are actively involved in habitat restoration, resource protection, invasive plant removal, and trail maintenance related activities. A great example is seen with the East Bay Regional Parks website (<http://www.ebparks.org/getinvolved/volunteer>).

National Campaigns

Some organizations use national campaigns to create a snapshot of wildlife during certain times of the year and create a database of information that can be used by scientists across the country to study and answer questions on wildlife trends. A great example of this is seen with the Great Backyard Bird Count (<http://www.birdsource.org/gbbc/>). This annual four-day event helps to document distribution and movements on many different species of birds in relation to habitat, temperature,

disease, and other environmental phenomenon. It also helps to draw attention to species that may need conservation attention. These types of projects can be a great way to represent a piece of your own local community in a larger picture.

Possibilities of Partnerships

One of the greatest rewards and possibilities in working with any conservation organization is the possibility of forming a partnership between yourself, your zoo, and the conservation organization you support whether it is local or abroad. However, there is a certain excitement and pride of being a part of a zoo that is engaged in its local and native wildlife conservation efforts. This support can come through the support of funds or staff time, but can really take off by taking your relationship to next level of exchanging information, expertise, and equipment towards a common goal. You could even be the catalyst or experiment in a burgeoning relationship. This has been the case with my work at the marine mammal center. The Oakland Zoo is looking at the work that I and other staff members do there as steps towards developing a conservation partnership. This would be done by supporting the work of the Marine Mammal Center with Oakland Zoo staff time, as well a creating the opportunity for volunteers and staff members of the Marine Mammal Center to share their work with a new audience. As for the Western Pond Turtle Project, this type of relationship has really started to blossom between the Oakland Zoo, San Francisco Zoo, and Sonoma State University, opening many doors for both students and staff to share and collaborate.

Conclusion

Wanting to get involved in wildlife conservation and the projects, organizations, and people who help to solve and reduce the numerous threats wild animals face in our modern society is not something that we should only dream about when we get enough money to travel abroad. Wildlife conservation is also not something that only happens in other countries - there is a lot of amazing work going on right around your own zoo or community. Although finding that work can be a challenge, there are resources and directories on the web and at your own zoo that can help you in finding them. In my case I was able to use those resources to help find some very rewarding local and affordable wildlife conservation opportunities that captivate my own personal interests and go along with my own personal goals, skills, philosophies, and family life. On top of that, I have been able to take my involvement in the wildlife conservation work I help with to nurture the early stages of a partnership plan that emphasizes information and expertise exchanges between the Oakland Zoo and the Marine Mammal Center. Keepers can be a powerful force and example for conservation in the natural world and we can do so by looking not only globally but in our own backyards as well.

Acknowledgements

I would like to acknowledge several people who have helped to push, inspire, work with, support, and involve me in some of the most rewarding work, activities, and organizations that have become such an important part of my life and who I am. A big thanks to my wife Olivia and son Noah, my boss Colleen Kinzley, my crew supervisor Sue Pemberton, my co-workers and friends Andrea Dougall, Darren Jensen, Karen Bosko, Maria Trenary, Rachel Wells, Cathy Keyes, Gina Gambertoglio, Margaret Rousser, Adam Fink, Chris Allen, and Kristen Mealiffe.

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Conservation/Legislative Update

Column Coordinators: *Becky Richendollar, North Carolina Zoo
and Greg McKinney, Philadelphia PA*

*This month's column was put together by
column co-coordinator Becky Richendollar*



Pandas Slated for Canadian Visit -The Toronto Zoo has finalized negotiations with the Chinese government about the loan of two giant pandas (*Ailuropoda melanoleuca*). The animals, now living in a zoo in Chongqing, will begin their Canadian experience in 2012. The pandas will live at the Toronto Zoo for 5 years, then move on to Calgary Zoo for 5 years, and then finish their stay with 5 years at the Granby Zoo, in Quebec.



Giant Panda in Sichuan, China
(Photo: Wikipedia.com)

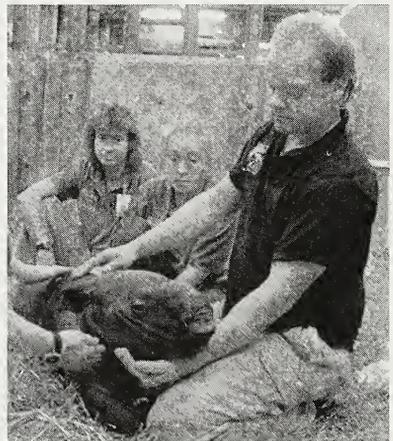
Zoo officials have been negotiating with the Chinese government for 9 years in an effort to borrow the rare animals. Now the work will begin trying to obtain funding for a new \$10 million exhibit to house the animals. In addition, the Toronto Zoo will pay a yearly fee of \$1 million to the Chinese government for the pandas. The zoo estimates that the pandas will bring in \$10 million annually, offsetting the cost of housing the animals. *Source: Toronto Sun, October 31, 2010*

Indian Rhino Calf Dies - Staff at the Cincinnati Zoo & Botanical Garden faced heartbreak in late October as they dealt with the death of their new Indian rhino calf (*Rhinoceros unicornis*). The male calf survived for only 13 hours. The calf's mother, 18-year-old Nikki, gave birth to a stillborn female calf in 2008. Both pregnancies were achieved through artificial insemination using frozen-thawed sperm. The sperm had been collected from Bronx Zoo resident Vinu.

The pregnancy had progressed without complications, but the calf was not breathing or moving at birth. He did have a heartbeat and staff performed CPR for 45 minutes until he began to breathe on his own. His blood work and body condition appeared normal, and the calf was vocalizing with his mother in an adjacent stall. Nikki was doing well after the birth, allowing keepers to collect milk from her so they could feed the baby once his condition was stable. After only 13 hours, the calf stopped breathing and zoo staff were unable to resuscitate him a second time.

There are currently approximately 70 Indian rhinos, also called Greater One Horned rhinos, in the United States. Breeding the animals can be challenging as they are often extremely aggressive during courtship which can result in serious injuries.

The Indian rhino is listed as vulnerable with 70% of its population living in India's Kaziranga National Park. *Source: Cincinnati.com, October 26, 2010*



Cincinnati Zoo staff attend to the 0.1 Indian rhino calf born there in October. The calf lived for 13 hours.

(Photo: Cincinnati Zoo)

AZA Benefits from Zooborns - Two years ago Chris Eastland, an artist and photographer from Brooklyn, NY and Andrew Bleiman of Chicago joined to create the website ZooBorns.com. The site, which receives a million hits monthly, features new born animals from zoos and aquariums from around the world. The pair say the only requirement to be included on the site is cuteness.

Now the site creators are publishing two hardcover books, one a children's book and the other for adults. Both are entitled "ZooBorns!" and the Association of Zoos and Aquariums will receive 10% from sales of the books. AZA doesn't only benefit from the profit, but also because promoting zoo births is good for conservation.

Since last summer, the website has featured over 600 births from 165 different species. The species are mostly birds and mammals, although once they featured a photo of a baby Caecilian, a legless amphibian at the Tennessee Aquarium. Eastland confirmed that the site's all time most popular photo was of the Fennec Fox. This photo is on the cover of the upcoming book. *Source: AP, November 5, 2010*

Fight for Polar Bear Not Over - In early November, a federal judge asked the United States Department of the Interior to re-think the 2008 decision about listing the polar bear as Endangered. The ruling resulted from a lawsuit brought against the Department of the Interior by the Center for Biological Diversity, the Natural Resources Defense Council, and Greenpeace.

The three conservation groups originally petitioned the Bush administration to list the polar bear as Endangered under the Endangered Species Act. In 2008 the Bush administration agreed to list the polar bear as Threatened. At that time, Bush officials felt that polar bear extinction was not imminent, which they argued was a requirement for an Endangered listing. In his ruling, U.S. District Judge Emmet Sullivan rejected that argument, and ordered that the Interior Department re-examine the text of the Endangered Species Act and reconsider its definition of Endangered.



"Protecting the polar bear's home is the same as protecting us all from the dangers of climate change, and the best way to do that is to acknowledge the danger of climate change and act on it. The Obama administration can take a step in this direction by giving the bears the protecting they deserve," said Dan Howells, deputy campaign director of Greenpeace. The judge set the next hearing date for February, 2011. *Source: Center for Biological Diversity, November 5, 2010*

Polar Bears are being reconsidered for the Endangered Species List.

(Photo: Polar Bears International)

Rare Turtles Saved from Soup - Fifty Yellow-Headed Temple Turtles (*Hieremys annandalii*) were rescued from Hong Kong where they were being illegally smuggled to China. An endangered species, the Yellow-Headed Temple Turtle can grow up to two feet in length.

Officials did not know where the confiscated turtles had originally been captured so were unable to release them back in to the wild. No home for the large turtles could be found. Then the Turtle Survival Alliance (TSA) became involved. The Texas-based organization sent out a plea to its members and quickly raised enough funds to fly the turtles to the United States.

"It doesn't sound like much of a challenge to house 50 turtles, but you have to remember that this species can reach two feet long and weigh more than 35 pounds," said Rick Hudson, conservation biologist and TSA President. "They need large outdoor ponds with clean water and warm temperatures year-round.

Taiwan-based EVA airlines agreed to fly the turtles to the U.S. at a discounted fair, and the turtles were flown to Florida. After a stop at the Jacksonville Zoo for examinations, the turtles were transported to private property in Florida. The TSA hopes to see some breeding out of the group over the next few years. This population will serve to ensure that the species does not become extinct. *Source: ENN, November 3, 2010*

Latest Estimates from Deepwater Horizon Spill



Volunteers at the Fort Jackson Wildlife Rehabilitation Center in Louisiana wash an oil-covered pelican. The bird was rescued from Barataria Bay.

(Photo: Carolyn Cole / Los Angeles Times / May 25, 2010)

turtles, 456 of which were visibly oiled. Mammals fared better, with two out of nine live mammals collected visibly oiled. Worst were the birds: 2,079 have been collected alive, every single one of them visibly oiled.

It is important to note that all of these numbers are estimates and that some of the animals killed could have died from natural causes. *Source: Discovery News, November 2, 2010*

L.A. Zoo Opens New Elephant Exhibit - In December, the L.A. Zoo welcomed visitors to its new Elephants of Asia exhibit. The new six-acre exhibit features a waterfall, pools, sand substrate, and several features for its residents. Billy, the zoo's 25-year-old Asian elephant was led to his new exhibit in November. Billy followed a trail of pumpkins keepers had put out for him and began exploring his new exhibit. Zoo staff said that watching Billy enjoy the new space was "an amazing and rewarding sight." The new exhibit will educate visitors about Asian elephants (*Elephas maximus*) and their cultural significance in India, China, Thailand, and Cambodia. Visitors will also be given an opportunity to donate specifically to causes that can help these animals in their native habitats. *Source: AZA, November 5, 2010*

World Leaders Adopt New Biodiversity Plan - In October environmental leaders from nations around the globe met in Nagoya, Japan. After several days of negotiations, officials reached agreements that could help stem the alarming rate of extinction worldwide.

Among the agreements made, participants vowed to expand nature reserves to 17% of the world's land area by 2020. This would be an increase from the 10% we have in reserves today. In addition, the world's aquatic life would be provided with greater protection as 10% of the world's oceans would fall into a marine protected zone, which is up from only 1% right now.

Late night negotiations also saw delegates at this United Nations Conference on Biodiversity agreeing to what is known as the Nagoya Protocol. This agreement emphasized the importance of sharing

genetic resources with undeveloped nations and indigenous communities. This would allow that any pharmaceuticals or other economically valuable items that were used from a certain area would benefit the economy of the area in which that item came from. All of the delegates at the conference signed the Protocol.

Amid concern about lack of funding and the absence of support from the United States, several delegates were hopeful. "This is a day to celebrate in terms of a new and innovative response to the alarming loss of biodiversity and ecosystems," said Achim Steiner, executive director of the UN Environment Program. *Source: guardian.co.uk, October 29, 2010*

California Condor Population Hits 100 - The total number of wild, free-flying condors (*Gymnogyps californianus*) in California has reached 100, the most in half a century.



A California condor protects its chick in a nest cave near Hopper Mountain National Wildlife Refuge.

(Photo: U.S. Fish & Wildlife Service)

of habitat and the decline of the large mammal populations they fed on. More recently, lead poisoning from ammunition and the ingestion of bits of trash have taken a toll.

Arizona, Utah and Baja Mexico also have wild populations. But even when captive birds are counted, there are fewer than 400 California condors in the world. *Source: USFWS, October 28, 2010*

World Turns Eyes to Disappearing Tigers - For three days, forestry officials from nepal and Myanmar, wildlife officials from Laos and Malaysia, and environmentalists from Bangladesh and Thailand roamed the gilt halls of czarist-ear palaces in St. Petersburg, Russia, talking of tigers and searching for the political will to save them. That resolve was pronounced "found" by Russian Prime Minister Vladimir Putin, who shared a dais at the International Tiger Forum with Chinese Premier Wen Jaibao and World Bank President Robert Zoellick, among others

"We have put the tiger on the agenda of the international community," said Putin, adding that when heads of government take the time to meet on behalf of a big cat, they are serious indeed.

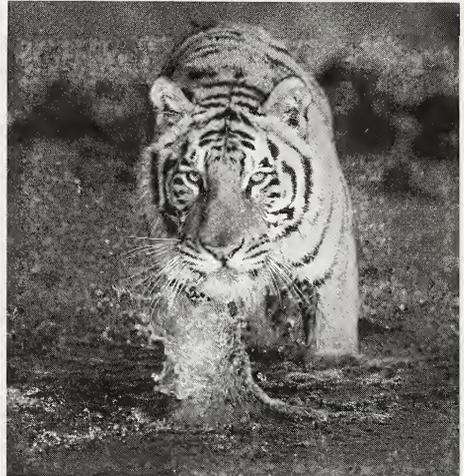
"The world is looking at us to act boldly," said Nepalese Prime Minister Madhav Kumar Nepal. "We need less conservation and more conservation."

Tigers are in desperate straits. Their numbers have dwindled to 3,200 from about 100,000 a century

ago, and they are expected to become extinct unless there is a concerted effort to stop poaching of the cats and their prey and to protect the wide landscape they inhabit.

The summit of 13 tiger-range countries - which include Vietnam, India, Indonesia, Cambodia and North Korea - were convened to endorse the Global Tiger Recovery Program. Under the plan, the delegates committed doubling the number of tigers by 2022 by developing conservation programs and cooperating across national boundaries to stop poaching and illegal trade in tiger parts.

An additional \$350 million is needed over the next five years to pay for the program, which was initiated two years ago when a World Bank employee told Zoellick that tigers were about to disappear, "When you hear that, you're shocked," said Zoellick. From that moment, the tiger became a World Bank cause. The bank has a presence in all the tiger countries, Zoellick pointed out, and knows not only the officials at the top but the government workers who run things. The bank knows donors, too. The bank is fine-tuning the way it operates and won't finance infrastructure in core tiger areas.



The tiger's future will depend on the will of nations to commit to its survival. (Stock Photo)

Zoellick said the bank hopes to provide \$100 million in financing to help prevent illegal trade in tiger parts and poaching in Nepal, Bangladesh, Bhutan and possibly India. Other commitments came from the World Wildlife Fund for at least \$50 million; the United States for \$9.2 million to fight poaching and trafficking; Germany for \$17.2 million for landscape conservation; the Wildlife Conservation Society for \$85 million; and the Global Environmental Facility for \$12 million.

Was the summit a success? Joe Walston, the Wildlife Conservation Society's Asia director, considered the question. "We'll know in 12 years," he said. Source: *The Washington Post*, by Kathy Lally November 24, 2010.

Two More Rare Red Foxes Confirmed in Sierra Nevada

Once thought to be extinct, federal wildlife biologists have confirmed sightings of two more rare Sierra Nevada red foxes (*Vulpes vulpes necator*) they believe are related to one that was photographed this summer near Yosemite National Park.

More importantly, scientists say DNA samples show enough diversity in the animals to suggest a "fairly strong population" of the foxes may secretly be doing quite well in the rugged mountains about 90 miles south of Reno.

The first confirmed sighting in two decades came in August when a female Sierra Nevada red fox was discovered in the Humboldt-Toiyabe National Forest. Forest Service officials confirmed that two additional red foxes—one male and one female—were photographed within about four miles of the original in September. Source: *Associated Press* by Scott Sommer, December 3, 2010



Once thought to be extinct, the Sierra Nevada red fox may be alive and thriving.

(Photo: LATimes.com)

Animal Keepers' Forum 2010 Index

Volume 37, Numbers 1-12

AARDVARKS & OTHER BIOTA

A		K	
Alligator		Klipspringer	263-265
American	316-318		
Chinese	23-26	L	
Alpaca	27-28	M	
		N	
B		O	
Baboon		Okapi	46
Anubis	442-447	Orangutan	73-76
Bear	280-287	Bornean	334, 485-493
North American Black	358-359	Ostrich	161-163
Polar	62-63, 505, 529-530, 532-533, 566-570	Otter	
Bulbul		North American River	340-344
Red-vented	231-233		
Butterfly		P	
Monarch	64	Panda	
		Giant	64
C		Peccaries	
Camel		Collared	95-98
Bactrian	250	Pelican	
Colobus		Brown	418
Black and White	86	Penguin	
Crane		African	134-138, 248
White naped	176-182	Humboldt	448-453
		Magellanic	63
D		Rockhopper	201-205
E		Pygmy-Falcon	
Emu	161-163	African	209-212
		Q	
F		R	
Flamingo		Rhea	
Caribbean	145-148	Greater	169-172
Chilean	145-148	Rhinoceros	
Greater	193-195	Black	55
Lesser	409	Eastern Black	272-277
G		Javen	64
Goats		Northern White	66
Nigerian Dwarf	266-270	S	
Gorilla	70-72, 106-107	Seal	
Mountain	63-64	Northern Fur	462
H			
Hawk		Sheep	
Red-tailed	132	Barbados Blackbelly	266-270
Hippopotamus	319-322	Spoonbill	390-393
Hornbills		Roseate	220-224
Southern Ground	206-208	T	
Sulawesi Knobbed	173-175	Tapir	
I		Lowland	435-439
Ibis			
African Sacred	196-200		
J			

Tawny Frogmouth	164-168	Vulture	
Thrush		Cinereous	149-153
White-crested	213-219	Lappet-faced	234-237
Tiger	62		
Tinamou		W	
Elegant Crested	158-160, 353-356	Walrus	536
Tuna		Pacific	62-63
Bluefin	63	Wolf	
Turtle		Red	294
Leatherback	63		
		X	
U		Y	
V		Z	
Viper		Zebra	
Gaboon	2	Plains	374

AMERICAN ASSOCIATION of ZOO KEEPERS ANIMAL KEEPERS' FORUM

2009 Animal Keepers' Forum Index	39-44	Breeding Cinereous Vultures (<i>Aegypius monachus</i>) at The Milwaukee County Zoo	149-153
2010 AAZK Award Recipients	382	Breeding White-crested Laughing Thrush (<i>Garrulax leucolophus</i>) at the Birmingham Zoo	213-219
2010 AAZK National Conference Philadelphia 10-11, 131, 254, 256, 300, 302, 338, 422		Bringing up the "Seattle Four" a Success for Humboldt Penguins	448-453
2010 AAZK National Conference Philadelphia – Second Call For Papers	6	Climate Change: Fact and Fiction	515
2010 AAZK National Conference Philadelphia – Third Call For Papers	56	Climate Change: Pushing Species to the Brink	516
2010 AAZK National Conference Philadelphia – Fourth Call For Papers	94	Climate Change: The Effect of Climate Change on Migratory Birds	564-565
2010 AKF Award Recipients	383-384	Climate Change and Amphibians	537-541
2010 National Zoo Keeper Week Proclamation	297	Communicating About Climate Change	547-548
2010 National Zoo Keeper Week Dates	48, 89, 251	Conditioning 0.1 Eastern Black Rhinoceros (<i>Diceros bicornis michaeli</i>) for Behavioral Restraint in Diagnosis and Treatment of Vitiligo	272-277
2011 AAZK National Conference San Diego – First Call for Papers	472	Conserving the World's Reefs Through Live and Frozen Banks	558-563
A Message from Polar Bears International	509	Creative Thinking Keeps Flamingos Breeding	409
About the Cover		Designing a Keeper and Bird-Friendly Enrichment Program	155-157
Bactrian Camel	250	Development of an Aviary Training Program: Enhancing the Daily Management of Zoo Atlanta's bird collection	140-144
Black and White Colobus	86	Enrichment and Training...It's For the Birds	183-189
Bornean Orangutan	334	Feeding the Spoonbills: From Nightmare to Dream	390-393
Brown Pelican	418	Female Reproductive Parameters and Calf Development in Captive Klipspringers (<i>Oreotragus oreotragus</i>)	263-265
Gaboon Viper	2	First Time Breeding of Captive Sulawesi Knobbed Hornbills (<i>Aceros cassidix</i>) at St. Augustine Alligator Farm Zoological Park	173-175
Northern Fur Seal	462	Frogmouth Management at SeaWorld Orlando and Discovery Cove	164-168
Okapi	46	Global Warming Threatens Future of Coastal Fishing	578-579
Polar Bear	505	Global Warming To Seriously Affect Global Health	535
Red-tailed Hawk	132		
Red Wolf	294		
Plains Zebra	374		
Announcement from <i>AKF</i> Editor on Avian Husbandry Issue	87		
Arctic Ambassador Centers	580-581		
Articles			
A Call to Action for Polar Bears	532-533		
A Climate Change Primer	514-515		
All Wet! An Innovative Water Sprayer System for Hippo Enrichment	319-322		
Artificially Inseminating White-naped Cranes	176-182		

Greater Flamingo (<i>Phoenicopterus roseus</i>) with Capture Myopathy: Specialized Care & Husbandry	193-195	Supplemental Feedings to Aid a Parent-reared African Pygmy-Falcon (<i>Polyhierax semitorquatus</i>) Chick	209-212
Hand-Rearing Caribbean Flamingos (<i>Phoenicopterus ruber</i>) and Chilean Flamingo (<i>Phoenicopterus chilensis</i>) Chicks at the Birmingham Zoo	145-148	Taking Action Against Climate Change	552-553
Human Intervention in the Rearing of an Infant Bornean Orangutan (<i>Pongo pygmaeus pygmaeus</i>)	485-493	The Barometer of Life	554-556
Iconic Animal Populations Being Decimated by Habitat Loss and Poaching: Climate Change Emerges As Clear Threat on WWF's Annual "10 to Watch" List	62-64	The Butterfly Effect: Global Warming Changes Butterfly Habitat and Behavior	546
Incubation and Hand-rearing of a Greater Rhea (<i>Rhea americana</i>) at the Great Plains Zoo	169-172	The Future of Zookeeping and the Challenges Ahead	14-21
Insects 'will be climate change's first victims'	557	"The ICZ: Ten Years and Growing Strong"	303-306
International Animal Shipping One of the Most Daunting Zoo Experiences There Is	360-367	The Management and Breeding Program of Roseate Spoonbills at the Palm Beach Zoo at Dreher Park	220-224
Jess Free	190-192	The National Zoo's O Line: The Enrichment Value of an Orangutan Transit System	73-76
Learning to Walk Again: Paralysis in an African Penguin	134-138	Training and Enrichment Advances for a Chinese Alligator at Disney's Animal Kingdom	23-26
Living with the Polar Bears of Churchill During Keeper Leadership Camp	584-587	Training North American Black Bears for Blood Draws	358-359
Malignant Malaria Found in Apes	106-107	"Trees for You and Me" Program an Instant Success	550-551
Melting Under Pressure The Real Scoop on Climate Warming and Polar Bears	566-570	Two by Two on the AArk	545-546
New Animal Species Discovered in Borneo	454	U.S. Peaks Also Show Effects of Global Warming	544
Patience...	582	Walrus Seeking Refuge in Alaska	536
PBI Leadership Camps	583	Where Have All the Big Bears Gone? Churchill's Population First to Raise Questions	529-530
Planting Trees for Polar Bears	549	Why Display Native Animals?	103-106
Protocol for Training Select Individuals from a Large Group of Socially Housed Anubis Baboons (<i>Papio anubis</i>)	442-447	Wildlife, Warming and Whatever: The WWW Generation	518-528
Puppets: Construction and Use for the Hand-rearing of Birds	225-230	Zoo Saves Research Monkeys from Euthanasia	318
Raising Red-vented Bulbuls (<i>Pycnonotus cafer</i>) in Tropic World Asia Bird Holding	231-233	Avian Trivia	237
Ratite Behavior Husbandry at the Philadelphia Zoo	161-163	AZA Professional Development Opportunities	419
Reef Relief	534-535	Book Reviews	
Rhino News Notes	66	Amphibian Biology Volume Eight (Amphibian Declines)	78
Rhino Poaching at Lewa Wildlife Conservancy	55	Bats in Captivity. Volume 2: Aspect of Rehabilitation	308
Scientist Find Human-Caused Climate Change at Root of Diminishing Water Flow in Western U.S.	531	Encounters with Florida's Endangered Wildlife	308-309
Seman Collection on Rockhopper Penguins at the Indianapolis Zoo	201-205	On the Wings of Cranes	247
Sessions for All Seasons: Lappet-faced Vulture Training	234-237	Part of the Pride: My Life Among the Big Cats of Africa	22
Setting Up a Picture Perfect Success	206-208	'Spot the Difference' – are cheetahs really just big cats? Using the Domestic Cat as a Model for the Nutritional Management of Captive Cheetahs	279
Snow Covers the Peak of Mount Kilimanjaro in Tanzania – But for How Long?	542-543	The Intimate Ape: Orangutans and the Secret Life of a Vanishing Species	278
Species Abound in Arctic Reserve	577	Turtles: The Animal Answer Guide	22, 33
Storybook Safari	32-33	Wild Mammals in Captivity: Principles & Techniques for Zoo Management, 2nd Edition	441
Successful Rearing of an African Sacred Ibis (<i>Threskiornis aethiopicus</i>) Chick at the Toronto Zoo	196-200	Bowling For Rhinos Conservation Resource Fund Grant Announced	114
Successfully Managing a Mixed-Species, Free-Flight Aviary	238-246	Call for Papers – AAZK Special Issue on Climate Change	296, 379
Successfully Raising Parent-reared Chicks from Elegant Crested Tinamou (<i>Eudromia elegans</i>)	158-160	Chapters	
		AAZK Chapters Help Underwrite AKF Production	295
		AAZK Indianapolis Chapter (AAZK Indy)	464
		Attention All AAZK Chapters – Recharter Time is Here!	3

Avoid a Late Fee – 2010 Recharter		32nd Annual Elephant Manager's Association Conference	300, 338, 380
Deadline Approaching	47	65th Annual Conference of WAZA	254, 300, 338, 380, 424
First Annual San Diego American Association of Zoo Keepers Photo Contest	405	2010 Aquatic Animal Nutrition Workshop	424, 470
New Orleans Chapter	377	2011 AZA Ungulate TAG Midyear Meeting	424, 470
Point Defiance AAZK Chapter	336	2011 Rhino Keeper Workshop	254, 300, 338, 380, 424, 470
Reminder to All Chapters on Recharter Process for 2011	463	Animal Behavior Management Alliance (ABMA) Annual Conference - 2010	8, 51, 92
Topeka AAZK Chapter	419	(The) Aquarium and Zoo Facilities Association's 17th Annual Conference	300, 338, 380
Utah Chapter AAZK	296	Association of Professional Wildlife Educators	254, 300, 338, 380, 424, 470
Collaborators Sought for Study – The Use of Vocal Playback as a Tool for Breeding in Captive Birds	153	AZA 2010 Annual Conference	254, 300, 338, 380
AAZK Committees		AZA 2011 Annual Conference	470
Awards		AZA 2012 Annual Conference	424, 470
AAZK Awards Committee Seeking Members	251	AZA 2013 Annual Conference	424, 470
From the AAZK Awards Committee	375	AZA Orangutan SSP® Workshop	92, 254, 300, 338, 380
Time to Nominate Your Peers for AAZK Awards	47, 89	Browse and Toxic Plants	352
Behavioral Husbandry Committee		Giraffe Professionals Conference	8, 51
AAZK Behavioral Husbandry Committee Announces 2010 Contest Winner!	375	International Association of Avian Trainers and Educators (IAATE) Conference	8, 51, 380, 424, 470
BIG Benefit for Contributing to TT or EO Columns!	4, 67, 87	International Gorilla Workshop – 2010	8-9, 51-52, 92
Chance to Win Free Conference 2011 Registration Offered	419, 475	IUCN XIth International Otter Colloquium	254, 300, 338
Bowling for Rhinos		National AZAD Conference	9, 52, 92, 254, 300, 338, 380
"Bowling for Rhinos Beginnings"	3	Passerine Workshop	254, 300, 338, 380, 424
Bowling for Rhinos Honorary Trip Winner Announced	109	Seeing the Zoo the Way Animals Do	424
Bowling For Rhinos Recipe for Success	108-109	Training and Enrichment Workshop for Zoo Animals	338, 380, 424, 470
Bowling For Rhinos Update 2010	440	(The) World Congress of Herpetology	424, 470
Choosing a Date for Bowling For Rhinos Events	3	Zoos and Aquariums Committing to Conservation	380, 424, 470
Congratulations to the 1st Recipient of the Bowling for Rhinos Conservation Resource Grant	375	Conservation/Legislative Update	
Event Information Sheet	61, 110	600 Penguins Die in Cold Snap	368-369
Grants		\$300,000 Needed to Help Save Last of Javan Rhinos	459
AAZK/Geraldine Meyer Professional Development Grant Report	58-59	African Penguin Recieves Endangered Species Act Protection	503
AAZK Grant Report	496-497	Alaska Court Stops All Oil and Gas Activities in Chukchi Sea	414-415
AAZK Professional Development Grant Report	121	Animals Rescued in Texas Arrive at Detroit Zoo	123
AZA Class Review: Advanced Avian Program Management	400	Arabian Oryx Runs Wild Once More	370
For The World's Waterfowl – AAZK Professional Development Grant Report on Sylvan Heights Avian Husbandry & Management Program	430-434	Arctic Pipeline Closer to Becoming a Reality	80
Conferences – Schools - Workshops		Arizona Man Pleads Guilty in Jaguar's Death	326
4th Otter Keeper Workshop	8, 51, 92	BCI Supports Forest Service Cave Closures	416
6th Annual Zoological Association of America Conference	380, 424, 470	Black Rhinos Released in Tanzania in 'Most Ambitious' Relocation of Mammals Ever	328-329
7th International Penguin Conference	9, 52, 92, 254, 300, 338	Brown Pelican One Victim of Gulf Coast Spill	288
11th Annual Animal Behavior Management Alliance (ABMA)	470	Brown Pelican Soars Back	35-36
20th International Zoo Educators' (IZE) Biennial Conference	9, 52, 92, 254, 300, 338, 380, 424	CITES May Expel Zimbabwe Due to Rhino Losses, Rampant Wildlife Poaching	83
24th International Congress for Conservation Biology	254	Colorado Paves the Way With Wildlife Corridor Legislation	369-370
30th Annual AZVT Conference	300, 338, 380, 424	Conservationist's Boat Sinks After Clash with Whalers	80-81
		Controversial Ruling in Germany Sparks Debate	455
		Damage from Gulf Coast Oil Spill Continues	288
		Deepwater Doom: Extinction Threat for World's Smallest Sea Horse	458-459

Elderly Malasian Rhino Enlisted in Breeding Attempt	502-503	Oregon Zoo Works to Save Threatened Silverspot Butterfly	410
Elle MacPherson Uses Rhino Horn?	456	Phoenix Zoo Team Travels to Jordan to Assess the Health of Endangered Arabian Oryx	501-502
"Extinct" Fox Discovered in Yosemite	455	Polar Bears Changing Habitat in Response to Sea Ice Conditions	83-84
Feds Deny Protection to Tiny Rabbit	500	Prairies Get Flurry of Ferrets	498
Feds Reviewing List of Endangered Species	416	Rare Oregon Zoo-Reared Frogs Enjoy Successful Release	35
Feds to Review Status of Mexican Gray Wolf	413	Revolutionary Zoo Professional Devra Kleiman Dies	291
Feds Want to Keep Big Snakes Out of U.S.	126-127	San Francisco Pier Missing Usual Residents	81
First Aquarium in US to Breed Dwarf Cuttlefish	37	Scientists Question Government Team's Report of Shrinking Gulf Oil Spill	415
First Ever Pictures of Mysterious Mammal	411	SeaWorld Orlando Fined \$75,000	456
Fishermen Angry Over Red Snapper Ban	79-80	SeaWorld Recieves 40 Oil-impacted Turtles from Audubon Zoo	458
Five Penguins Win U.S. Endangered Species Act Protection	412-413	Senate Votes to Uphold Clean Air Act	369
Genomic Zoo Aims to Sequence DNA of 10,000 Vertebrate Species	34	Snails Help Cross River Gorillas	289-290
Georgia Governor Sonny Perdue Called on to Ban Rattlesnake Roundups	128	Snake Escape Causes Alarm in Atlanta	456-457
German Scientists Discover Rare Ape Specie in Asia	499-500	St. Lucie OKs Elephant Center Project	127-128
Government Agencies Join Together for Migratory Birds	289	Survey Begins on Elephants in Indian Zoos	457
Groups Challenge State's Beluga Lawsuit	413	Thailand Fails To Be Delisted from Ivory 'shame file'	290-291
Gulf Oil Spill Likely to Hit U.S. Atlantic Coast This Summer	331	Third Oldest Chimp Becomes Mom	457
Haiti's Fragile Ecosystems Facing Disaster	460	Toronto Zoo Goes Green with Poo	289
Harsh Conditions May Lead to China's First Animal Welfare Law	368	Tragedy in Chinese Zoos Due to Underfed Animals	79
IG Report: Last U.S. Jaguar Captured, Killed Intentionally	124-125	Two Groups to Sue BP Under Endangered Species Act	331
In Reversal, Jaguar Habitat Will Be Protected	123-124	Two More Federal Courts Shoot Down Harmful Bush-era Policy	503-504
India Launches Tigernet	122-123	Twyacross Zoo Funding to Help Save the World's Most Endangered Apes	499
India to Move Zoo Elephants to Protected Parks	37-38	Tylenol-loaded Mice Dropped from Air to Control Snakes	457-458
India to Reintroduce Cheetahs into Grasslands	411-412	US Fish and Wildlife to Review Wolverine Status	288-289
India's Last Dancing Bear Saved	81-82	US Senate Approves Wildlife Stamp	456
Joint Forces to Prevent Extinction of Smallest Rhino in the World	36-37	US Wildlife Facility Touts Artificial-Insemination Births of Endangered Onagers	413
Kenya Breaks Ranks with Tanzania on Ivory Trade	82-83	Wetland Aliens Cause Bird Extinction	327-328
Last Attempt to Save Northern White Rhinos	79	Where Have All the Turtles Gone?	504
Legal Settlement Will Protect 7 Penguin Species at Risk from Global Warming and Fisheries	329-330	Why Vanishing Snake Colonies Have 'large-scale Implications' for Humanity	370-371
List of Endangered Species Growing Longer	326-327	Wildlife Conservation Society Applauds Senate for Giving "Stamp" of Approval	412
Lorises at Risk from Illegal Trade	330	World's First as British Museum First to Breed Beetle in Captivity	460
'Lost' Amphibian Species Rediscovered	500-501	Zoo Taunters Face Harsher Dues	122
Major Population Crash of Critically Endangered <i>Taita Apalis</i>	498-499	Zoos Warn of Mass Extinction from Climate Change	38
Manatee Monitoring	369		
Meet the Five Almost-Endangered Species of 2009	34-35		
Nation's Zoos Stand Ready to Help	372		
New Act Supports Wildlife Veterinary Medicine	125-126		
New Animal Species Discovered in Borneo	292		
Northern White Rhino De-horned	290		
Obama Administration Denies American Pika Endangered Species Act Protection	127		
Obama Cancels Offshore Oil Lease Sales in the Atlantic and Gulf of Mexico	413-414		
Obama Restricts Oil Drilling in Alaska, East Coast, Gulf of Mexico	331		
Officials Meet to Discuss Polar Bear Harvest	368		
Oil Spill Creates Huge Undersea 'Dead Zones'	332		
Oil Spill Numbers	372		
One Step Closer to Understanding Devil Disease	80		
		Conservation Station Column	
		Acting Locally	307
		Creating and Maintaining Partnerships for Conservation: Two Perspectives	401-404
		Go Green this Spring!	111-113
		Leading the Way to a Greener Future: A Keeper's Role in the Development and Expansion of Their Zoo's Green Team	481-483
		Zambian Reunion: How One Keeper Made Her African Dreams Come True... Twice.	29-31
		Correction from the <i>AKF</i> Editor	47

Debuting New AAZK Logo Clothing Product	426, 476
Donation to Lutz Ruhe Educational Trust	251

Enrichment Options Column

Bah Bah Black Sheep!	266-270
Environmental Enrichment for North American River Otters	340-344
Paper Projects at the Sedgwick County Zoo	323-325
Pecs, cameras, action!	95-98
Prototype Superworm (<i>Zophobas morio</i>) Dispenser as Multi-species Environmental Enrichment	396-399
PVC Hopper Feeder	473-475
Tapir Enrichment: Deciding “when” is just as important as deciding “what”	435-439

Feather Facts	200
Follow Conservation Work Worldwide on Twitter	87-88
For Further Information on Climate Change	588
From the <i>AKF</i> Editor	133, 509
From the Editor on December Dedicated Issue	463
From the Executive Director	90, 298, 378, 468-469
From the President	4, 54, 133, 252, 335, 379, 420-421, 465-466, 510-513

Get your shopping list ready!	349
IMPORTANT NOTICE for all Members with PayPal® Accounts	47, 89, 270, 300
In Memorium – Lutz Ruhe – AAZK Benefactor	49-50
Invitation to Participate in Big Cat Survey	376, 427, 471
Letters to the Editor	394-395
New AAZK Award Announced	88
New Members	5, 53, 91, 257-258, 300, 337, 381, 427, 471
Nominations for the 2012 Indianapolis Prize	
Open until January 21, 2011	357
Notes from the Climate Change Panel Discussion	
Held at the 2010 AZA Conference in Houston, TX (Global Warming)	571-577
Notice from Bank of America on AAZK Credit Cards	463

People Skills for Animal People Column

Conflict Resolution – Consider This	406-408
Keeper Communication Skills	310-315
Keepers and Communication, Part I	12-13
Keepers and Communication, Part II	68-69
Keepers and Communication, Part III	99-101
Keepers and Communication, Part IV	261-262
Resolving Work-Related Conflicts	346-348
Sexual Harassment in the Workplace: What is it? What Do We Do About It?	477-480

Polar Bears and Sea Ice: Interact LIVE with Dr. Ian Stirling from the Polar Bear Capital of the World November 16th, 1 pm CST	484
Probe Ordered in Rhino Slaughter	337

Publications

Keeper Profiles – DVD	77
New Resource CD Available from AAZK Inc. – Crisis Management Resources for Zoos and Other Animal Care Facilities	60, 102

Special Double Issue of <i>Animal Keepers' Forum</i> Dedicated to the Care and Management of Geriatric Animals Available for Purchase	65
---	----

Reactions Column

Renovation of cat exhibits	350-352
Role of the ratio of weapons to responders in ERT practice	115-116
SAVE THE DATE! AZA Orangutan SSP® Workshop 48	
Special Pricing Planned for Merchandise at National Conference	309
Thank You from <i>AKF</i> Editor	4
Tiger Survey Participation Request	251

Training Tales Column

Beat the Heat: Our Top 10 Summer Survival Training Tips	386-388
Building Bridges: How to Select, Condition and Use a Bridging Stimulus	117-120
Meet Your Behavioral Husbandry Committee	428-429, 494-495
Operant Conditioning and Wellness in American Alligators (<i>Alligator mississippiensis</i>)	316-318
Teaching Bo to Cush: Alpaca Training at the Toronto Zoo	27-28
Tinamou Training	101, 353-356
Training Bears for Voluntary Blood Collection	280-287
Visitor Cued Gorilla “Tree Climb” Behavior	70-72
Transitions	84
“Trees for You and Me” AAZK Chapter Challenge	259-260, 434, 480
Types of Feathers	219, 224
Upcoming AAZK National Conferences	9, 52, 92, 254, 300, 338, 380, 424, 470
Upcoming AZA National Conference	9, 101, 356, 408
Volunteer Opportunities in AAZK	48

Websites/Listservs/Web Resources/Blogs

Avian Rearing Resource Website	154
Avian Websites to Check Out.....	247
Check Out AAZK on Facebook	381
Check Out the New Resources Available in Member’s Only	295
Internet Searching for a Cause	301, 376
New Material Continues to be Added to Member’s Only Section of Website	107, 376
Website Sale	254, 306, 408, 447, 475



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