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International Bear News

*Quarterly Newsletter of the
International Association for Bear Research and Management (IBA)
and the IUCN/SSC Bear Specialist Group*

November 2008 Vol. 17 no. 4



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Animals Asia Foundation is working to end the horrific bear bile milking industry in China and Vietnam. When “Jasper” came to Animals Asia’s China sanctuary in 2001, he was very thin, much of his hair was missing from years of rubbing against his cage, his teeth were badly worn from bar biting, and he had a metal catheter implanted in his abdomen. He was cut from a “crush cage” where he had spent 15 years. After surgery, months of rehabilitation, tasty food, and tender loving care, this bear is now healthy, energetic, and appears to be enjoying life. See the full story on page 7.

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Cover photo courtesy of Animals Asia Foundation.

International Bear News, ISSN #1064-1564, quarterly newsletter of the International Association for Bear Research and Management (IBA)
Editors: Matt Durnin (Managing), Jordan Schaul (Correspondence), Janissa Balcomb (Layout), Jim Tomlin (Production/Distribution), Tanya Rosen (Translation)
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Email: ibanews@bearbiology.com, Websites: www.bearbiology.com www.bearbiology.org
Back issues are available at www.bearbiology.com

Editorial Policy

International Bear News welcomes articles about biology, conservation, and management of the world's eight bear species. Submissions of about 750 words are preferred, and photos, drawings, and charts are appreciated. Submissions to ibanews@bearbiology.com are preferred; otherwise, mail or fax to the address above. IBA reserves the right to accept, reject, and edit submissions.

Deadline for the February 2009 issue is January 5, 2009

Thank you to everyone who contributed to this issue. Artwork is copyrighted – do not reproduce without permission.

Membership

Use the form on page 29 to order or renew memberships, make donations, and/or update member information.

From the President

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It has been a busy summer for bears and bear biologists around here. Bears are frequently in the news and sometimes more than we want. Numerous incidents involving black bears were reported throughout the southern Appalachians and several hit close to home. In one case, an 8-year-old boy from Florida was attacked by a black bear in Great Smoky Mountains National Park but survived without serious injuries. The incident was serious because it had many elements of a predatory attack. The father and brother of the boy responded quickly and effectively and twice pulled the bear away from him. Fortunately, the bear was only 40 kg. After several similar incidents in our region in recent years, including 2 human fatalities in 2000 and in 2006, much media attention was given to this incident. Journalists started asking whether the behavior of bears was changing, making bears more inclined to attack. It is a reasonable and innocent question but the implications would be far-reaching if this were the case, particularly in areas with high bear densities and high human visitation. However, simple statistics may provide a more logical explanation: with greater black bear densities in the region over the past 30 years and increasing recreational use, the likelihood of these aberrant encounters may simply be increasing. Of course, the message for bear biologists and resource managers is to be prepared for this and increase public awareness of bear behavior and explain how to respond to different types of bear encounters. Resource management agencies in our area have

committed substantial effort to this. As a result, I believe visitors and recreationists in our area have gained a better understanding of bear behavior and I hope this increased awareness prevented this bear attack from being much worse. I am using this example to make the point that how we deal with human-bear conflicts is critical for bear conservation throughout the world; the larger lesson is that we cannot be complacent about this topic.

Elections

In this issue of *International Bear News*, you will find a ballot for the IBA elections and for ratification of the interim bylaws that council voted on last March in preparation for IBA's incorporation filing. Although our intention was to send a separate ballot at an earlier date, we decided that it was much more economic to include the ballot with this newsletter. This caused a slight delay of the deadline for the votes (see enclosed ballot). Your votes for the council positions and the Bylaw ratification are very important so please take the time to vote. And please return the ballot as soon as you receive this issue, this is particularly important for those of you outside of North America.

Georgia Conference

I'm sure many of you have followed the news from Georgia and wondered whether IBA will be able to host the conference there a year from now. First, on behalf of the IBA Council, let me express my deepest concerns for all those people who have been affected by this conflict. For many of us these types of situations are far from the reality of our daily lives and it is easy to forget the real tragedies behind the stories we hear and see in the news. When Council examines bids for hosting conferences, an important consideration is whether an IBA conference can raise the profile for bear conservation in a particular country or region. This was certainly

a factor in choosing Georgia as the host of the 2009 IBA Conference.

Despite those good intentions, no one could have predicted the events in August, in which Russian troops entered 2 regions of Georgia, south Ossetia and Abkhazia. Following the news of the conflict, we were in contact with the Georgian organizers to gauge the situation. After an initial assessment from the conference organizers, Council decided to wait for 6 weeks before making any decision regarding the feasibility of hosting the conference, while exploring options for alternative dates or venues. During that time the situation calmed down substantially although some uncertainty remains about funding and attendance if the conference is to be held a year from now. At the time of this writing, Council had not yet made a decision so please check the IBA website for the most recent updates on the Georgia conference.

IBA's 40th Birthday?

Some of you may have wondered whether we should be celebrating IBA's 40th anniversary this year. I added a question mark to the subheading because there is some contention regarding the official founding date of IBA. Some count the first, informal meeting of 49 North American bear biologists in Whitehorse, Yukon in 1968 as the beginning of our organization. However, the reality is that the concept of a formal organization was not conceived until the 3rd International Bear Conference in Binghamton, New York in 1974. Some well-known bear biologists present at that conference, including Chuck Jonkel, Jack Lentfer, Mike Pelton, and John and Frank Craighead, had a 'hallway discussion' in which the idea of a formal "Bear Biology Association" (BBA) was formed. The first Council meeting, however, was not held until 1977, at the Kalispell, Montana meeting. Chuck Jonkel was elected as the first president of the BBA (in 1983 renamed to International Association for Bear Research and Management or

IBA) at the membership meeting on 22 February 1977.

Regardless of whether 1968 or 1977 is the true founding year of IBA, we have a long history. Maybe I am just getting old but there is something valuable in revisiting the past. For those of you who attended the Gatlinburg conference in 1998, you may recall Al LeCount's interesting and entertaining presentation on IBA's history. For those who were not there, I encourage you to read the associated paper (*Ursus* 11:11–20) because it provides a summary of important accomplishments of IBA. As Al stated in that article, "For many of us, a lifelong commitment to the welfare of bears worldwide has been fostered through IBA". It is clear from our conferences, publications, and student participation that this commitment has only grown stronger over time. That is a good thing, we need it now more than ever.

Bears and Cats

Very few taxon-specific, international organizations dedicated to science-based conservation and management exist with such a rich and successful history as IBA. Recently, the Wild Felid Research and Management Association (WFA) was founded, which was structured largely after IBA. We are honored that the organizers of this association saw IBA as a worthy role model. The conservation issues that many cat species face are all too familiar to bear biologists so there will be natural connections between the 2 organizations. I hope the Wild Felid Research and Management Association will become as successful as IBA and wish them the best of luck. Without suggesting that you switch your "taxon affiliation", I encourage you to support this new organization and to check out their website: www.wildfelid.org 📧

Research and Conservation Grants

Fred Dean, Program Chair
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Thank you again to those grantees who have sent in progress and final reports without reminders and prompting. It is clear that the IBA grants continue to be very helpful in supporting good research as well as soundly-based and innovative conservation programs. Those of you who have reports overdue are jeopardizing your chances of receiving grants in the future.

I hope to put some of the information from grant reports, or even whole reports, on the IBA Website. Any report submitted that meets the terms of the grant agreement will be considered eligible unless the report author tells me that there is a good reason not to do so under special circumstances. A statement to that effect will become a part of the new grant agreements.

At this time, I have no good information on the impact that the financial turmoil may have on the funds available for grants this coming year. It would not surprise me if there was less money than in the past few years. If that is the case, it will be all the more important to prepare well-written proposals for sound projects. Give the process plenty of time.

Finally, a recommendation for an excellent book, helpful to both students and professionals in our field (Audiences and presenters will appreciate it too!):

Duarte, Nancy. 2008. *Slide:ology, the art and science of creating great presentations*. O'Reilly, Sebastopol, California. xix + 274 pp. Paper. U.S. and Canada \$34.99 list price.
www.oreilly.com.

It is also available from local dealers, and online from Amazon.com and Barnes and Noble.

This book picks up where Edward Tufte leaves off. The author is a proven professional in the field of designing effective presentations. The layout is creative and right to the point. I recommend the book highly and believe it will be read and then frequently referred to by many people. (Think beyond stumbling through the options of common presentation software, which most of us have done too frequently.)

We do not expect major changes in the RCGC process this year, but check the website before preparing proposals. 📧

IBA Experience and Exchange Grants

**Deadline for Applications:
January 1, 2009**

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The deadline for applying for IBA's Experience and Exchange (E&E) grants program for 2009 is January 1, 2009. Please note that both of IBA's grants programs, E&E and Research and Conservation (R&C) grants share the same application deadline.

E&E grants are an excellent way to gain experience and international perspective, benefit from others' expertise in a field setting, and initiate or strengthen across-project collaborations.

Application information and forms can be found on the IBA website, at www.bearbiology.com. For other questions, contact Ole Jakob Sorensen, E&E program chair, at the above address. 📧



Berries, Nuts n' Grubs

Food for Thoughts About Bears

A Quarterly Column by Diana Doan-Crider

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The goal of this column is to provide a sounding board for management tips, philosophies, and current happenings in the bear world that deserve some digesting. These are the topics that are generally not published in the scientific journals, but are more often heard around bear biologists' coffee tables. We would be as happy as a habituated bear in a garbage can to entertain some of your ideas, or help answer any questions with the help of people who know a lot more than I do.

Innovation and Preparedness in the Field

This section may seem a bit elementary, but perhaps it is more directed toward those (ahhhem...) that grew up around technology vs. those of us who had to use a typewriter to type our thesis. It is easy to get dependent on cell phones, high-tech GPS units, or handy emergency features in your car that talk to you in wispy female voices when you've had an accident. But take it from those of us who remember what it was to rely on common sense to get us out of trouble – it never hurts to be innovative and to be prepared. Here's Tip #1: always have a back-up plan. Even if you DO have your cell phone, it is still a good idea to let someone know where you are going, make sure you have a full tank of gas, and STILL carry emer-

gency supplies in case you get stuck somewhere. I'm amazed at how many people now days who just wander out into the wilderness without any precautions just because they think they can call someone if they need help. *Newsflash*: cell phones have batteries, which die. They can break, get wet, get lost, or lose service in a canyon. We used to make every field technician carry a small radio collar in case we needed to find someone - now they have handy GPS transmitters for that – which I strongly recommend. Tip #2: be innovative. One of the marks of a true bear biologist is someone who is ready for anything. Take these guys: Tim Thier wrote in with a great story when he, Joe Perry, and Mark Haroldson got a pickup stuck in Trail Creek, Montana in 1976 (waaaay before AAA Roadside Service). They were working for Chuck Jonkel and the Border Grizzly Project at the time, so many of you already know that adventure was just part of the job description. Fortunately, they were prepared with a come-along. Unfortunately, it fell far short of the nearest tree. With some innovation using a set of snow chains and an old steel-jawed bear trap (that Chuck, for some reason, had put in the truck while doing bear work in the 1960s), they were barely able to reach a tree. A few strokes on the come-along and they finally freed the truck from the mud-hole. What I want to know was *when was the last time they cleaned out that truck?* As Chuck would say, "don't throw that out! You never know when you might need it!" Brian Scheick also tells of a similar story when he used an old cable snare to

winch their truck up a tree when the U-joint broke. Tip #3: always carry the bare essentials. John Hechtel told me of a time when he broke his leg out in the field while doing den work, and used duct tape to strap his leg to his snowmobile so he could get back to camp. I have used duct tape to strap my water bottle to my waist when I forgot my backpack, and even to tape my boots together when the sole fell off while I was hiking. My emergency field pack usually includes: duct tape, matches and a lighter (in case the matches get wet and in case the lighter breaks), flashlight, space blanket, granola bar, a small first aid kit, water, water, and more water. Some people have a lot more in their packs; but more or less, you get the idea. Don't get lazy, and don't let an emergency remind you that you should have prepared better. Tip #4: don't let failed technology get you down. If something breaks, don't let that limit your ability to get the job done. While I was in the field, I tried to use equipment that was easy to fix. The fancier air guns and rifles were tempting, but since I was about 6 hours from the closest Mexican town, and about 12 hours from the closest U.S. town, getting that fancy equipment fixed wasn't an easy chore. In particular, I was once convinced to buy a fancy CO2 gun, but right in the middle of darting a bear, a screw popped out (and disappeared) and the whole thing came apart. We were able to make a jab-stick out of a yucca stalk, but the delay only added to the stress for both me and the bear. I ultimately resorted to making my own darts, and used a very nice, handmade blow gun that I

could fix using practically anything. On another occasion, we had hiked about 7 hours to a den on the top of the highest peak in the mountain range, only to find that we had forgotten the slip covers to our dart needles (another handy tip – ALWAYS check your equipment before you head out into the field!). Fortunately, someone had brought a jalapeno in their lunch sack that was wrapped with Saran Wrap, which we used to make into a pretty nice slip cover (the Saran Wrap – not the jalapeno). Once, I actually lost my blow gun while I was trying to get a bear out of a Mexican jail in the high country of Chihuahua, but was able to use a leftover piece of PVC pipe that worked just fine. I should add that, I had run out of the plastic tubing used for my slip-covers, but was able to buy a plastic worm used for fishing at a local hardware store, cut it into a ¼” piece, and it worked like a dandy. Brian Scheick has also used a paperclip as a make-shift antenna when he had to wander far away from his truck-mounted antenna to find a dropped radio collar. Unfortunately, things are rapidly becoming too high tech - I can now only dream of the time when we used to fix our pickup trucks with a nylon stocking, duct tape, and a piece of inner tube.

Added Safety for Cable Snares

Montana bear manager and researcher, Tim Thier, taught me a trick for ensuring bear safety if and when you have to use some cable snares. The U-bolts that are commonly used with the snares can sometimes cut into a bear's foot, causing injury. In addition, if not checked often, the U-bolts can sometimes come loose, which could be a real nightmare if a bear charges you at that very moment. Instead, Tim used Nycopress aluminum clamps in place of the U-bolts, which quickly made me into a convert. You have to use a special “Nycopress” implement to seal the clamps, but it's worth the time and

effort, especially if you make your own snares anyway. I purchased my own aircraft cable and cut it into lengths using a cutting torch; if you cut them with a wire cutter, then ends can fray, making them difficult to use with the Nycopress clamps. To slide the cable in through the holes on the Nycopress clamps, you simply file down the ends with a metal file if there is too much burnt metal residue from the cutting torch. For additional safety, we started adding a blob of silicon glue and completely encasing each clamp (letting dry at least 24 hours); this helped prevent any chaffing from the clamps if the snare was too tight or if the bear had been in the trap overnight. Let me know if you need any more information, and I'd be glad to send you some photographs. I am sure others have developed many other safety tips, and we'd love to hear about them.

Where Are They?

For those of you who aren't aware, **John Hechtel** has retired from Alaska Fish & Game Department after 25 years. We've been tracking his status to make sure we don't lose sight of this IBA favorite. He's made a radical move to New Mexico – perhaps to thaw out after all those years up north. He plans on continuing with his work on bear safety training; as you all probably know, John was involved with the video series, “Staying Safe in Bear Country” and “Working in Bear Country.” Don't worry - bears and bear conservation are still his passions, so we can plan on seeing his face in the bear world for years to come. He's enjoying his new life in the southwest by taking lots of side trips, raising some chickens, and growing his own vegetables. We can all go live with John if the economy collapses. His new contact information is: John Hechtel, 13305 Rachel Road SE, Albuquerque, NM 87123, USA; Email: john.hechtel@gmail.com.

A number of us from the IBA have missed seeing our old friend, **Gary Alt** at our bear meetings. I made contact

with Gary and found out that he is been missing us, too! After doing years of bear research in Pennsylvania, Gary was talked into running the state's white-tailed deer research and management program until his retirement in 2004. Since that time, he's been leading photographic and natural history tours all over the world. He's now living in Lagunitas, California (just north of San Francisco), and also spends time lecturing on deer and bear issues. In addition, he just recently took a job with Normandeau Associates (Environmental Consulting Company) evaluating environmental impacts of nuclear power plants and wind energy farms. Sounds like he hasn't wasted any time! Gary would love to hear from some of his old friends. His contact information is: Gary Alt, PO Box 370, Lagunitas CA 94938, USA; Phone: +1 415-488-4186; Email: garyalt@comcast.net.

Do you have anyone that you'd like me to track down? Just let me know!



Climate Change and Bears – Where is the IBA?

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In the February 2008 issue of the *International Bear News*, I summarized a workshop we held at the Mexico IBA conference on global warming, climate change, and bears. The workshop was well-attended and there was a lot of enthusiasm expressed by IBA members about the IBA getting involved in this topic. Six action items were identified at the workshop and detailed in the February *International Bear News* article. One of these items was to establish a web-based clearing house regarding

the impacts of climate change on bears in order to facilitate exchanges among bear scientists. This was done by creating an invited member's web-based discussion group. Twenty published papers on climate change and bears were placed on the web site as a resource file on this issue and it is hoped that additional literature and reports will be added by participants as they become available. To apply to the group go to: <http://groups.google.com/group/bears-climate/about>

Another workshop recommendation was to establish an IBA global warming/climate change work group with representatives from each species. This group would focus attention and help coordinate efforts of bear scientists currently working on the issue of global warming. This might involve the development of a session devoted to climate change issues at an upcoming IBA meeting and/or a regular update in the *International Bear News*.

Lastly, we recommended establishing a work group to develop species-specific predictions of the potential

impacts of global climate change. These species-specific predictions could be used to develop and standardize monitoring programs in order to measure impacts and test predictions empirically. For example, we could look at possible changes in den entry and emergence dates, or changes in the distribution or use of key foods.

In the February 2008 *International Bear News* article, I suggested that the next step was for the IBA Council and the BSG to decide if they wish to adopt any or all of these recommendations. To date, there has been very little interest in the climate change group discussion web site. I am not aware of any discussions by the IBA Council or the BSG on these climate change recommendations or any action on the recommendations to date. I am open to ideas on how to better involve IBA members and generate more discussions on this topic.

During the workshop in Mexico, we established that there was interest and concern among IBA members on the issue of climate change. There is no doubt that climate change is going

to impact bears with polar bears being the most impacted so far. It seems logical that we, as bear scientists, should begin to organize our monitoring programs to measure parameters that may change as the climate warms and precipitation changes. We should also be communicating among each other about ongoing research and monitoring efforts so that opportunities to cooperate and compare results in the long-term are maximized. This proactive approach will benefit bear conservation and improve our working efforts.

If IBA scientists want to work on this issue and form an IBA work group on climate change and bears to: 1) build an agenda for a specific climate change session at the next IBA meeting; 2) consider species-specific predictions on the effects of climate change and begin to share information on monitoring programs related to climate change effects; and 3) build involvement and participation in the climate change discussion web site, please contact me and we can work to get this started. ■

Bear Specialist Group

Animals Asia's Rescue of Farmed Bears

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Officially, 11,000 Asiatic black bears are held on bile-milking farms throughout China and Vietnam. Animals Asia Foundation, which is working to end this brutal, unnecessary industry, fears the figure could be

much higher. In July 2000, Animals Asia signed a landmark agreement with the Chinese authorities to rescue 500 farm bears in Sichuan Province, to work towards the elimination of bear farming in China, and to promote herbal alternatives to bear bile. The bile is used in traditional medicine for a range of complaints including fever, liver disease, and sore eyes. Synthetic and herbal alternatives are readily available. Under the agreement, officials have closed down the worst bear farms and permanently taken away the farmers' licenses. Animals Asia compensates the farmers financially, enabling them to retire or set up in another business.

The Foundation has uncovered and exposed several shocking techniques

for extracting bile that have been used since bear farming began in China in the early 1980s, all of them undeniably painful and ultimately life-threatening for the bears. Many farmers claim that a new catheter-free method of bile extraction (now the only legal method) – involving the creation of a permanent fistula or hole in the abdomen – is painless for the bears and that the industry, therefore, is now “humane.” However, the mortality rate of rescued bears that were subjected to this “free-drip” method is high. It is also painful, with the farmer having to jab the wound repeatedly with a metal rod as it attempts to heal over.

In March 2008, Animals Asia rescued 28 more Asiatic black bears (known locally as moon bears), bring-

Bear Specialist Group



Three trucks carrying 28 rescued bears rolled through the gates of Animals Asia's sanctuary in Chengdu, China on March 31, 2008. The veterinary team fully expected that some of the bears would need emergency medical attention, but nothing had prepared them for the horrific condition of these bears.

ing the total number of bears saved from bear farms in China to 247. Almost all of these bears were in very degraded physical condition. All were in impossibly small “crush” cages, and many weighed half what they should. Some were blind, some had their teeth deliberately cut away by the farmers, and many had ulcerated gums. One bear had holes in his jaw (which was also broken) where teeth had been pulled from the roots, and many had necrotic wounds. Most had open wounds in their abdomens from the free-drip method of bile extraction with some leaking bile, blood, and pus.

Since their rescue from bear farms, 16 bears have died, providing further evidence that the farming of bears for the trade in bear bile remains a brutal way to exploit bears for profit. Many were euthanized when nothing more could be done, while others have undergone surgery to remove their damaged gall bladders, repair hernias, remove cancers, and attend to broken, infected teeth from years of biting the bars of their coffin-sized cages. A quarter of the bears are missing limbs, very likely due to being illegally

snared in the wild prior to being caged in bear farms. Many of the rescued bears have died as a result of liver cancer; tumors weighing up to 7.5 kg, which have “seeded” throughout their bodies, have been observed by Animals Asia's veterinary team. The bile from most of the farm bears handled by Animals Asia was contaminated with fluids from the infections at bile removal sites. Given the unusually high incidence of liver cancer and presence of bacteria and contaminants in these farmed bears, the use of their bile as “medicine” for people is certainly a matter of concern.

Animals Asia has recently opened its new Moon Bear Rescue Centre in Vietnam, nestled in a beautiful valley in the buffer zone of Tam Dao National Park, 70km north of Hanoi. After conducting clinical examinations of the damaged gall bladders of farmed bears, a Hanoi-based pathologist recently expressed grave concerns for the health of both humans and bears.

Dr. Dang van Duong, Chief Pathologist at the Bach Mai Hospital in Hanoi said he was shocked by the condition of the bears and urged consumers to think twice before using bile from such diseased animals. After examining the gall bladder of one of the bears, and concluding that she had “severe chronic cholecystitis,” Dr Duong said, “I am wondering how this bear could have survived, because if this was a human sample, the person would have been dead long ago.” The other bears to undergo cholecystectomies had similarly degenerative gall bladders.

Bear bile farming is technically illegal in Vietnam, though the practice is still widespread, and an estimated 4,000 bears remain on bile farms (which are much smaller operations than in China). Toward the end of 2007, the Animals Asia team filmed an unconscious, caged bear on a



“Chengdu Truth” weighed only 65 kg – half of what a bear his height should weigh. He had a massive liver cancer that had seeded through his entire body. His forelimbs were bald, he had hyperkeratotic foot pads, badly cracked and dry from dehydration, and broken teeth. He was euthanized two days after arrival at the Animals Asia sanctuary.



"Banjo" shows his best side as he investigates one of the many enrichment items at the Animals Asia rescue centre.

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Co-chair: Captive Bear Expert Team

The Captive Bear Expert Team focuses on the role of captive bears in bear conservation. Toward that end, we collected baseline data during the past 2 years on the number of individuals of each species of bear held in captivity in different regions of the world. We tallied 4,230 captive individuals.

The data are most complete for Europe, Russia and adjacent countries belonging to the Community of Independent States (CIS), Turkey and Israel in the Near East, North and South America, India, Japan and Australia. In these areas, regional zoo organisations exert a level of management – at a minimum, they monitor population changes (births and deaths) and yearly status. Only patchy information from Southeast Asian zoos and rehabilitation sanctuaries is available (e.g., none from Laos), and data from captive facilities in China and S. Korea are completely missing. The thousands of bears (mostly Asiatic black bears) kept on farms for bile extraction in China and Vietnam are discussed in the accompanying article from Animals Asia, and were previously described by the Trade in Bear Parts Expert Team (*IBN* 17(1):23–24), so will not be considered here.

Even with data missing from large portions of Asia (Table 1), it is clear that most captive bears are in Asia (45%, see Figure 1). Europe is next: 28% of the captive bears that we tal-

farm, with empty ketamine bottles (a banned drug in Vietnam), four-inch spinal needles, nooses, restraints and bile juice on swabs nearby. Two busloads of Korean tourists were seen fleeing from the farm. In recent years, Vietnam authorities have promised to phase out bear bile farming and, in 2006, Animals Asia signed an agreement with the government to rescue 200 bears. As in China, the Vietnam sanctuary will have an herb garden containing 54 plant-based alternatives to bile, thus promoting ethical and cruelty-free options.

To date, Animals Asia has rescued 17 Asiatic black bears in Vietnam, and the government has promised to confiscate at least 50 more bears and place them into the care of Animals Asia by October 2008. Remarkably, nearly all of the former farm bears in both China and Vietnam are able to learn to walk again, and even run, swim, climb, and interact with the other rescued bears. There is hope, too, in that attitudes are changing in Asia. China especially is opening to the outside world like never before, and society is changing at a rapid pace. Respect for animal welfare is accelerating, particularly among young urbanites. Animals Asia's outreach

programs across the country continue spreading the word of the cruelty to bears and the alternatives to bear bile through the press, TV and public roadshows, and exhibits that elevate the profile of bears and promote respect for this majestic species. Through the network of support from university teachers and students and TCM (Traditional Chinese Medicine) practitioners, thousands of people are signing the Animals Asia pledge, which is simple but effective: "Rescue Black Bears, Give Up Using Bear Bile."



Inventory of Captive Ursids

Report from the Captive Bear Expert Team

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Table 1. Countries where data were lacking or incomplete

Syria	Thailand
Lebanon	Laos
Arabian peninsula	Vietnam
Iraq	China
Iran	Taiwan
Pakistan	Korea
Malaysia	Philippines

Bear Specialist Group

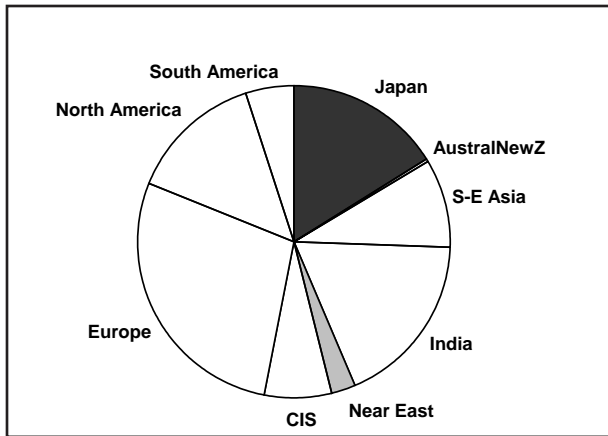


Figure 1. Regional representation of captive bears in zoos and sanctuaries (n = 4230)
(Note: The contribution of SE Asian facilities is underestimated, and some Asian countries with large numbers of captive bears are completely missing. See Table 1.)

lied live in European facilities monitored by the European zoo association (EAZA)(Figure 1); however, only 66% of these are in EAZA member zoos. North America holds 14% of all captive bears, the majority of which are in member zoos of the North American zoo organisation (AZA). Bears in North American rehabilitation centres (e.g., wild orphaned cubs) run by various NGOs are not included here, as many of them are released after rehabilitation and thus remain in captivity only a short time.

Brown bears make up one-third, and Asiatic black bears comprise 20% of the global captive population

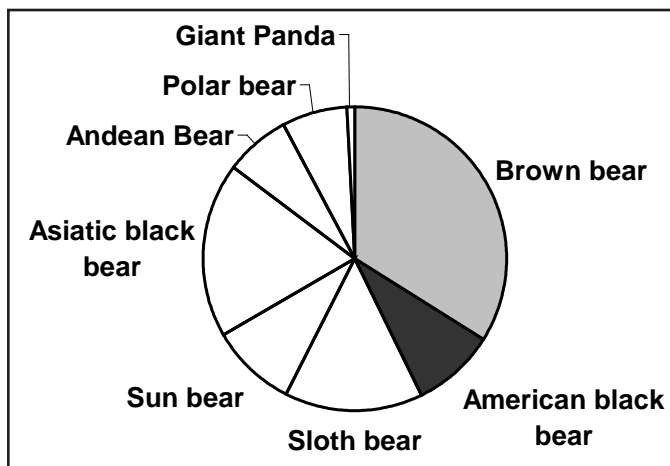


Figure 2. Species representation among captive bears, excluding thousands of Asiatic black bears on farms and private facilities in China, Vietnam, and South Korea. (n = 4230)

(however, Asiatic black bears would far exceed brown bears if all Chinese and Korean bears on farms and other private holdings were included). Sloth bears are the third most popular species, at 15% (Figure 2); 87% of these are in Indian facilities. More than half the sloth bears are wild-born, confiscated dancing bears, which are kept in large naturalistic sanctuaries, where they can display a wide variety of natural behaviours,

including social play. (See photo to the right.) Sun bears, American black bears, Andean bears, and polar bears are roughly equivalent in their contribution to the captive population. Giant pandas are available to only a few selected zoos outside China.

Regional captive populations tend to be dominated by bears native to each area. European brown bears compose 58% of the European ursid collection: 52% of them live in EAZA facilities, 29% in small, non-EAZA zoos, and 19% are housed in sanctuaries, often large naturalistic enclosures run by animal welfare organisations. (See top photo next page.) These are mostly cap-

tive-born bears that had been confiscated from very small zoos or private holdings with inadequate conditions.

In North American zoos, native American black and brown (grizzly) bears make up 50% of the captive ursids. Many of these are wild-born animals that were

removed from their natural habitat because they were causing problems for people. South and Central American zoos are dominated by Andean bears (59%). Native Asiatic black bears and brown bears make up 79% of the Japanese captive bear population. In India, nearly 100% of the bears in zoos



Sloth bears play fighting at the AGA Sloth Bear Sanctuary, India

and sanctuaries are native Asiatic black and sloth bears. Preliminary data from zoos and sanctuaries in Southeast Asia indicate that, like other regions, native bears (sun bears and Asiatic black bears) dominate these collections.

Reliable data on numbers of wild bears coming into zoos and other captive facilities are available only for those species recorded in formal studbooks. For example, the European studbook shows that 2–3 wild-born brown bears have been added per year during the past 20 years. The Andean bear international studbook shows the addition of 3–4 wild-born Andean bears per year. All these wild-born bears were victims of human activities, either orphaned due to poaching or driven into human settlements or agricultural areas by loss of habitat.

The majority of bears kept and managed outside of their natural range are captive born. Within the



Brown bears resting in a natural setting at Baerenwald Müritz, Germany

framework of the EAZA and AZA, sloth bears, Andean bears, sun bears and polar bears are managed in coordinated programmes. Intense genetic and demographic management is applied to minimise the risk of loss of genetic diversity, and in some cases to prevent genetic mixing of subspecies. Recommendations are made, based on studbook data, for specific pairings,



Even a concrete enclosure of 400m² can be made into a naturalistic environment with a layer of soil and vegetative cover. Grizzly bear at Koelner Zoo, Germany

All photo credits: Lydia Kolter

and designated bears may be moved among zoos specifically for such purposes. But even in these species, as well as others that are less strictly managed by studbooks, reproduction has to be kept low, because bears are long-lived and high quality spaces to

house them are at a premium.

In large parts of the world, husbandry of captive bears is in great need of improvement. The next step is to collate information on actual captive conditions, and compare this to minimum husbandry standards established in different regions by various organisa-

tions. Good examples of desirable conditions, even under restricted spatial situations, would be helpful (see photo below). A major contribution of captive bears toward the conservation of wild bears is through information and education. Housing bears in well-structured enclosures with natural vegetation, which stimulates a variety of species-specific behaviours, is not only more humane, but increases

public interest and learning opportunities.

Data for this report were contributed by Scott Carter, Detroit Zoo, AZA; José Kok, Ouwehand Zoo, Rhenen, EAZA; Olaf Behlert, Koelner Zoo, EAZA; Brij Kishor Gupta, New Dehli CZA India; Matt Hunt, Free the Bears, Phnom Penh; Kartick

Satyanaran, Wildlife SOS India; Gabriella Fredricksson, Sun bear ET Kalimantan, Indonesia; Agnieszka Sergiel, Wroclaw University, Poland; Mihaela Antofi, Ministry of Environment, Bucharest; Nilüfer Aytug, Bursa University; Kenneth Eckvall, Orsa

Bear Park, EAZA; Maria Krakowiak, Warsaw Zoo EAZA; Andres Bracho, Red Tremarctos; Karin Linke, Rosstock Zoo EAZA; Amy Hall, Durrell Wildlife Trust Jersey, EAZA; Lubov Kurilovich, Moscow Zoo, EAZA and EARAZA (Eurasian Regional Association of Zoos and Aquariums); Alexandros Karamanlidis, Arcturos.

Bear Conservation in Hukaung Tiger Reserve, Myanmar

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Hukaung Valley, in northern Myanmar (bordering Arunachal Pradesh, India), is a global hotspot for biodiversity. Widespread flooding during the rainy season and the prevalence of malaria has kept the human population low, thus providing a natural sanctuary for wildlife.



Hukaung Tiger Reserve, northern Myanmar

Bear Specialist Group

In 2001, researchers confirmed the presence of a breeding population of tigers, and in 2004, the entire valley was declared a tiger reserve. The Hukaung Tiger Reserve is now the largest tiger reserve in the world, covering an area of 21,800 km².



The Wildlife Conservation Society (WCS) worked together with the Ministry of Forestry to help delineate the boundaries of the reserve, settle land claims of local people, staff the reserve, and build guard stations and an education center. Natural resource extraction such as logging, rattan collection and gold mining in the area has been significantly reduced, as has local hunting of wildlife. Local people have been provided pigs and chickens to dissuade them from hunting ungulates.

Also present in the reserve are Asiatic black bears and sun bears. In April 2008, a mobile patrol team confiscated two Asiatic black bear cubs from a village near the reserve headquarters. A hunter had sold these two cubs to a local villager, after killing the mother bear. Stories about continued bear hunting in the reserve are not uncommon. Bears have been targeted because they are easily sold across the border in China

and other neighboring countries (see Shepherd and Nijman 2008). While adult bears are marketed for their gall bladders and paws, cubs are caged for future sale. As demand from China has increased for parts of tigers, bears, gibbons, and elephants, hunting along the Myanmar-China border has accelerated, as has trade in juvenile animals, like these two cubs. Increased patrolling and law enforcement are the main deterrents.

The Asiatic black bear is listed as a "Protected Species" under Myanmar Wildlife Law, while the sun bear is a "Totally Protected Species". Accordingly, offenders can receive heavier punishment for killing or harming the latter. Black bears, but not sun bears, can be killed, under special circumstances, with a license.

Both of the two confiscated cubs were sent to Yadanabon Zoo in Mandalay, central Myanmar. The incident is being used to inform local people of the illegality of this trade.

For more information:

Shepherd, C.R., and V. Nijman. 2008.

The trade in bear parts from Myanmar: an illustration of the ineffectiveness of enforcement of international wildlife trade regulations. *Biodiversity and Conservation* 17:35–42. 🐾



Is Animal Welfare Conservation?

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The quick and simple answer to our title question is no. Animal welfare is concerned mainly with the health and well-being of *individuals in captivity*. Conservation is concerned with the viability of *populations in the wild*. If all the bears in the world were placed in wonderful homes in captivity, their welfare would be well served but obviously not their conservation.

The question, though, deserves a more thoughtful response. Consider the case of farmed bears in China and Vietnam. Bear farming (which is legal in China but not in Vietnam) is conducted under the contention that an increased supply of bile, generated from captive bears, will satisfy demand and thereby reduce the impetus to poach wild bears. That argument itself is suspect, as the low price of farmed bile may actually encourage more users, some of whom may eventually desire wild bile (because farmed bile may be seen as impure or less potent), and thus continue to propel that market. The data to prove or disprove either side of this argument are nearly impossible to obtain. But one fact remains patently clear – many farmed bears are being kept in appalling conditions, where their health is unquestionably compromised and their psychological suffering immoral by most human standards.

Is there a tie between improving the status of farmed bears and conservation? We think there is. Animals Asia Foundation is leading a campaign to reduce the suffering of bears in farms by (1) convincing the Chinese and Vietnamese governments to close the worst farms; (2)

offering tangible assistance for helping the bears *in situ* should the Chinese Government commit to a formal timeline for ending all bear farming; (3) financially compensating the farmers and removing (“rescuing”) the bears once a whole farm is closed; and (4) trying to rehabilitate rescued bears (or euthanizing them, if necessary), and then maintaining them in a captive facility where they are well cared for. Their captive facility in Chengdu, Sichuan Province, China, attracts numerous Chinese visitors each year, particularly school groups, who learn of the farming practice, alternatives to the use of bear bile, and the impacts of poaching wild bears for their bile. In essence, the facility, which allows visitors to see rehabilitated bears playing contentedly in semi-natural enclosures, serves as a center for conservation education. Clearly, without the rescued bears, there would be no visitors to receive this important message. (Their center in Vietnam is not yet open to the public.)

Well beyond this, Jill Robinson, founder and CEO of Animals Asia, travels the world to raise the money needed to fund the rescues and maintain the two sanctuaries. She gives very gripping presentations about the horrific conditions of bears on farms – obviously an animal welfare issue to audiences who are mainly concerned with animal welfare. But by raising this issue in the public consciousness, she has made people aware of the broader issue of the impacts of the bear bile trade on Asiatic black bears (the prime target in this trade). Most people would probably not even be aware of Asiatic black bears had it not been for the animal welfare concerns over the farming. Recently *Asian Geographic* magazine conducted a public poll on the five most popular Asian animals. Obvious winners were the giant panda, tiger, orangutan, and elephant. But also making the “Big 5” was the Asiatic black bear, a real “dark horse” (unlikely contender) in the contest. The editor felt it was the widespread public concern over

the bile trade, and bear farming in particular, that inspired votes for them. Notably, Animals Asia urged visitors to their website to cast their vote (open to anyone in the world) for Asiatic black bears (more affectionately called moon bears). This species is now in the company of the Big 5 of Africa (lion, leopard, elephant, rhino, and buffalo) – quite a feat, and certainly helpful in terms of promoting its conservation.

Although conservation should not be a popularity contest, in truth it really is. Unfortunately, not everything can be saved. And although we might care a great deal about “biodiversity” in general, we have to admit that humans have prejudices for and against certain kinds of animals. As stewards of the bears of the world, we (BSG and IBA) do not want to promote these species at the expense of others, but we do nonetheless want to promote these species. If it takes cute, comical, and endearing photos of bears in a rehab facility like Animals Asia’s to emotionally inspire people to feel for these animals, then so be it. Conservation is emotional, and photos can be priceless.

Zoos, of course, have served this function for a long time. In the old days, zoos were places that people could see animals like bears pacing back and forth in their cages. They saw what the species looked like, but their condition in captivity did not encourage much positive emotional inspiration (other than compassion for the hapless individual). Many zoos today have recognized this, and have made conditions more favorable for the animals, fostering more natural behaviors against a backdrop of natural scenery, and hopefully rousing a greater interest and concern for the fate of these species in the wild. This is bolstered as well by educational information, which is likely to have a greater impact if the animals are viewed in semi-natural environments, which not only conjures up feelings of the wild, but is also considered more humane.

Maybe the most direct welfare–conservation link is funding. People flock to zoos (and pay entrance fees); they also donate, out of compassion, for various animal welfare causes. The connection between money spent and an end result is generally obvious. Conservation is expensive, but it is often harder to get people to pay for it, maybe because there are too many grave situations and nebulous ways to solve them. We cannot guarantee that a certain level of donations will save a threatened population. For the most part, we cannot even generate an accurate population estimate. We would be lucky to get a nice photo (e.g., with a camera trap) and some useful data. But zoos, and organizations like Animals Asia have recognized this, and have made contributions to conservation-related field studies (e.g., Animals Asia has funded a field study on the distribution of Asiatic black bears in central China). Obviously this support has been instrumental in conducting these studies, but also is beneficial to the organizations themselves, as their members and contributors appreciate that their donations are being wisely used both for welfare and for conservation.

So the more thoughtful answer to our title question is: animal welfare is not conservation, but can be integral in *promoting* conservation. In this issue of *IBN* we highlight Animals Asia’s bear rehab work in China and Vietnam, along with an inventory of other captive bears from the Captive Bear Expert Team. We also present a report on a bear conservation issue in a remote valley in northern Myanmar, supported by the Wildlife Conservation Society (formerly, the New York Zoological Society of the Bronx Zoo).



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The Andean Bear in the World View of the South American Andes

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The Juco in the Beliefs of the Gauchos

During our visits to the forest areas of northeastern Argentina (Salta and Jujuy), we spent time with the gauchos, the 'cowboys of Argentina,' and spent evenings at their ranches sharing coca leaves and mate (an infusion of 'yerba mate,' *Ilex paraguensis*), and other aromatic and medicinal herbs. The gauchos told us about a mysterious creature – half man and half bear – that lives in the forest and is often referred to as 'Juco,' 'Ucu,' 'Ucumar,' and 'Creole panda.' To our surprise, we discovered that that mysterious creature is our very own spectacled bear (*Tremarctos ornatus*).

The following are some of the beliefs that are widely shared about the spectacled bears of the cloud forest of North-East Argentina. They are part of the rich cultural heritage of the region. We collected these stories from the gauchos and the aboriginal people living there.

The Juco

Where the forest rises and the fog embraces it in the mountains, that is where the home of the 'Juco' lies.

Tied to the Juco are the majority of the sexual myths of the forest. Juco is described as attacking the young virgins and trying to have offspring with them. The female version of the the Juco will stalk young men. The local aboriginal people and gauchos say that, during the rainy season, men and women should stay out of the mountains. During this time, the Juco will leave the high cliffs and forests to stalk people in the villages in the lowland areas.

The incursion of men into the territory of the Juco is dangerous, too. People say that dogs will howl when they smell the presence of Juco and will run away once they hear the roars of the creature. The Juco will warn the people of its presence and will watch them from the high cliffs. If it feels threatened, it will push rocks to discourage them from getting any closer.



The *chubasquera* is a small bag used by the gaucho to store coca leaves. This one features an Andean bear and a jaguar. In front of the *chubasquera* is a *biquero*, a container made from the horns of the bull, for storing sodium bicarbonate which is used when consuming coca leaves.

The 'Art of the Juco'

On a drizzly evening, after walking along the banks of the Santa Maria, in the heart of the forest north of Salta, we stayed in the house of Don Ruiz, a timber guide. The house was like a little "fortress," surrounded by two meter high laurel sticks. Seeing my surprise, Don Ruiz said that the

"fortifications" were there to prevent the incursions of jaguars and the Juco.

Don Ruiz told us about something we had never heard before, the Art of the Juco.

"On a summer morning, I noticed jaguars near the house and decided to take a gun and look for the animals along the river. After walking for three hours, I sensed the presence of the jaguars. I decided to stop to eat and rest by a stream and sat below some trees and cliffs. Suddenly, I smelled a strange odor and heard a woofing sound. I picked up the gun right away and, high above the canopy, I saw a male Juco – dark, hairy, with big arms. He was staring me in the eyes without moving. I was hypnotized and incapable of holding the gun against him. In that instant, it seemed as if the world was him, until he turned and disappeared in the thick of the mountain forests" Don Ruiz says.

"I told the story to the old creole gauchos, and they told me I was victim of the 'Art of the Juco,'" he added.

"If the Juco looks at the hunter with a penetrating and prolonged gaze, it will take control of that hunter and his movements, a sort of hypnosis that will leave him frozen for some minutes without the hunter being able to do anything about it until the Juco is gone. This is 'the Art of the Juco.'"

The Son of the Juco

An old creole gaucho from the Colorado River in Salta, near the border with Jujuy, told us of the fate of one of the sons of Juco, a hybrid between a bear and a human. He was known as José Juco, a man with brown hair, medium height, with strong arms and feet, of the Kolla ethnic group. (Kolla are aboriginal people of the cloud forest and Andean highlands of Argentina, Bolivia, and Chile.) He had an angular face full of contrast. He also had a detail that did not go unnoticed. He was very hairy;

this was the reason why the creole and kollas concluded that José was one of the Juco's sons.

José Juco had some disagreement with his community and was no longer living there. Instead, he was living in a remote part of the forest. He would occasionally come back to trade with gauchos and kollas; he would bring wildlife hides and meat and trade them for utensils and other products. When he approached a ranch, the dogs would bark and howl upon feeling his presence. The horses would get agitated, even the most tame ones.

José was famous for his hunting skills. Nobody knew what techniques he used. Many concluded that his skills had to do with the fact that he might be related to the Juco. As years went by, conflicts between José and other hunters invading his territory increased. Since José hated the fact that people were killing so much wildlife, he stopped having respect for people and decided to move into an even more remote area of the forest. After that, he was never seen again.

Some believe that the fate of José was different. While looking for honey, José allegedly ran into some Jucos, and, at that moment, he decided to become one of them. By becoming one of them, he could no longer be human. Living in remote areas of the forest until his death, he created a new generation of human-Juco hybrids. 🐻



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The Juco Project: advances in determining the presence of the Andean Bear in Argentina

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The biological and ecological study of the Andean bear (*Tremarctos ornatus*) and its forest life is still in its infancy. Advances in these areas require an understanding, first, of the overall distribution of the species. So, we are exploring new regions and searching for indications of the presence of the bear in the southern part of Bolivia and the 'Darién gap' between Colombia and Panama.

Our study area is in the cloud forests in the northeastern part of Argentina. Given the recent indirect indications of the presence of the bear in this area, we decided to carry out the "Juco Project" to understand the distribution of the bear and possible threats to its survival. (The name 'Juco' means 'bear' in the aboriginal dialect *rusanimi*.)

As part of the Juco Project, we carried out a "program of rapid evaluation" (RAP) in new areas of Salta and Jujuy. We did approximately 7-day-long surveys; we visited two study sites (S_E) found in the *Reserva de Biósfera de las Yungas* (RBYUN) by foot or on horseback (Figure 1). The area in question is 13,287.2 km² and is found in the Tucumano-Oranense o' Yungas Forest.

The study sites were chosen because of their good conservation status, the low occurrence of anthropogenic activities (timber logging, cattle rearing and oil extraction), the altitude, and the composition of the flora for sampling purposes. S_{E1} is in the northeastern part of Salta; S_{E2} is in the southeastern part of Jujuy. Each study site is approximately 25 km².

For each study site, we established two 5-km-long linear transects. The profiles of the transects reflect an altitudinal gradient, which includes river, stream, beach, low forest, mountain forest, and cliffs. These were identified in the search for different indirect indications of the bear's presence and activity.



Figure 1. Reserva de Biósfera de las Yungas (RBYUN) in Salta and Jujuy, northeast Argentina.

© Salta and Jujuy Provincial Governments

We used Global Position Systems (GPS) to georeference the data found, define the influence of environmental variables in areas where data were collected, such as linear distance from sources of water (temporal and permanent) and type of vegetation. We divided the data into five types: tracks, scratches, signs of feeding, beds, and scats.

With some rare exceptions, we used the data in a combined fashion to find the most direct evidence of the bears presence or activity, with the

exception of scats that provided that direct evidence alone. This way, we made sure that we were not mistaking these signs with indications of the presence of other species.

However, at times, we used trained scat dogs (Figure 2). Using scat dogs is recommended for optimizing the identification of bear signs and the collection of data such as fresh scats and hair, in case they are needed for subsequent analysis. Using scat dogs is recommended if the dogs are well trained and healthy so that they do not disturb the wildlife and introduce diseases.

We found bear signs in two of the four units of vegetation found in the ecosystem (Figure 3), in the mountain forest and mountain forest/high pastures areas. The signs found were distributed between the northern part of Salta and Jujuy (longitude 24° 30' S). The altitude encompassed is between 500 and 2400 meters above sea level.

The RBYUN and its connectivity with the neighboring *Reserva de Flora y Fauna de Tariquia* (Tarija, Bolivia), with more than 13,400 km² in area combined, is of vital importance for the establishment of a biological



Figure 2. Gaucho y Baqueano, the scat dogs.

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corridor for bears and other large carnivores of conservation value like the the jaguar (*Panthera onca*) and mountain lion (*Puma concolor*). We need to stop the current trends that are accelerating habitat fragmentation (like the plans to build a hydroelectric dam on the high banks of the Bermejo River) and ensure the natural genetic exchange between the bears at the edge of the range and the ones in Bolivia. 🐾

Presence of the Andean Bear in the Mountain Forest and “Pajonal” in Luya, Amazonas, Northeastern Perú

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During the first months of 2008, a joint study started between my

research group and the research group that studies infirmities in amphibians in the ‘Huiquilla Private Conservation Area’ (www.huiquilla.org), located in front of the district of Longuita in Luya, Amazonas, in northeastern Perú. These kinds of private conservation areas are part of conservation initiatives started by nature loving people. These people try through the sustainable management of natural resources and ecotourism to protect the species of flora and fauna that are threatened; they also seek to protect the quality of life of the nearby rural communities. When I talked to the manager of ACP Huiquilla, Mr. José La Torre, I asked if he had seen any sign of Andean bears (*Tremarctos ornatus*). He answered how people from different generations have been telling different stories related to the presence of the Andean bear in this area. He also said how during a herpetological study the year before one Andean bear was spotted in the ACP and it was thus probable that there were some bears in the area.

(continued on page 17, after the Special Election Supplement ...)



Figure 3. Sign of left paw of an Andean bear (*Tremarctos ornatus*), in the Tucumano-Oranense ó Yungas forest, northeast Argentina.

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Figure 1. Map of Amazonas, with areas of potentially suitable habitat for the Andean Bear. The arrow shows the district of Longuita. Adapted from Amanzo et al. 2007.

IBA 2008 Election Supplement

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IBA Candidate Statements

Nominee for Vice-President Eurasia

Piero Genovesi

Since my election at the IBA conference in Riva del Garda, I had three fantastic years in my role of IBA Vice President for Eurasia! In this time I had the opportunity to work closely with many colleagues from the Americas, Europe and Asia. I worked at organizing workshops in Abruzzo and Spain that I believe concurred to improve bear conservation in these areas – that host the most threatened bear populations of Europe. Also, I had the fortune to attend the wonderful IBA conference in Japan

– the first ever in Asia – and experience the enthusiasm and dedication of many friends working on bear conservation in Asian countries.

I think this has been a really special moments of increased international role of IBA, and of growing enthusiasm in so many countries toward bear conservation. And hope you will give me a chance to continue my effort to support strengthening the IBA work around the world.

Nominees for Council (2 positions)

Mark Haroldson

I had my first experiences working with bears during the summer of 1976 as a work-study student at the University of Montana. From that point I was captivated by bears have made studying them my life's work. Through the years I have had the good fortune to study both black and grizzly bears throughout the Rocky Mountains and to work with many renowned biologists. For the last 25 years I have worked for the Interagency Grizzly Bear Study Team in Greater Yellowstone Ecosystem. My first 15 years with the study team I was primarily a field biologist, tasked with maintaining a sample of radio-marked bears throughout the ecosystem. My focus was narrow, immediate, and likely very similar to many biologist involved with the day-to-day aspect of capturing and handling bears. During the last 10 years my role with the study team has broadened and evolved in to one of supervision, analyzing, and writing. Through these changes in my professional responsibility I have gained a greater appreciation for the role our science has had on management and policy surrounding grizzly bears in the Yellowstone Ecosystem. I have become more informed regarding regional and international issues confronting bears. I am a long standing member of the IBA and view our organization as vital in the conservation of bears worldwide. I also believe that we need to find innovative ways to educate our publics regarding conservation and management of bears. I consider it an honor to be nominated for council, and if elected, will serve the IBA with dedication. Thank you for considering me.

Mei-Hsiu Hwang

After receiving my PhD degree from the Conservation Biology Program, University of Minnesota in 2003, I am currently an assistant professor at Institute of Wildlife Conservation of Taiwan's National Pingtung University of Science and Technology. As the co-chair of the IUCN/SSC Asiatic black bear Expert Team, I have conducted research on Asiatic black bears in Taiwan for 12 years. My collaborative bear research and conservation work have extended into South Korea, China, Vietnam, and Malaysia. In my homeland, I have been dedicating to bring the locally endangered bears back from the edge of extinction. In addition to carrying out the challenging field and community-based studies on locally endangered bears, I have organized workshops, symposia, and developed websites related to bear conservation.

IBA has special responsibility in today's world of dwindling bear resources. I have great ambitions of enhancing public awareness of a myriad of bear issues, and providing long-term sustainability of bear resources through conservation-oriented research and education programs. I believe, there is a critical need to allocate more resources to preserve bears in Asia where 6 threatened bear species reside, and any other developing countries where human-caused mortalities continue to jeopardize the declining bear populations. For doing this, technical and grant support through international collaboration can be further encouraged. Moreover, worldwide culture-and value-based information related to bear-human interactions should be addressed and integrated into internationally environmental education

IBA Candidate Statements

Nominees for Council (2 positions)

networks. Finally, for advancing the IBA positions, I advocate fostering effective public and political campaigns to raise conservation funds, and eliminate illegal hunting and consumption which imperil our bear families.

With my decade involvement with IBA, I have not only gained enormous help (e.g., research and travel grants, and participation of conferences) in developing my academic career, but also seen enormous accomplishments made by IBA. However, I believe, more can be done. With my scientific training, teaching, and both community and medium-related experience, I will be much honored to serve as a council member to aggressively defend bears.

Alexandros Karamanlidis

When I first started working with brown bears five years ago, I never could imagine that one day I might be writing a candidacy statement for the Council of the International Bear Association. Obviously, I did not know back then, how things work around the IBA. The firm commitment of the IBA to guide and support bear research and conservation where mostly needed, in combination with the IBA conferences the newsletter and the Truman list, they all dragged me into the “bear” world and infected me with the incurable “bug” of helping protect the species.

Now, time has come to give something back! What I might lack in experience I will match up with enthusiasm, hard work, and tenacity in my efforts to fulfill the mission statement of the IBA. Drawing from my personal experience within the IBA, I am particularly keen on developing even more, two of the features of the IBA that I believe have made it so successful over the past years. The first is the active recruitment and the encouragement towards effective participation in the IBA of international members, especially those from less – represented countries and those with threatened bear populations. The second is the guidance and support provided to young students and professionals in finding their way around and encourage their professional development. Two features that I know that in the long run will come back to benefit the IBA, but mostly the species that we are trying to protect.

Ali Nawaz

I have recently completed my PhD in Norway on the ecology, genetics and conservation of Himalayan brown bears. In this study, I looked at conservation problems of a small population living at high elevations of Himalaya. My association with bears is about 10 years long, and I participated both in research and conservation for bears in Pakistan. I contributed the most fundamental data on ecological requirements and genetics of high elevation brown bears. Apart from this pioneering research in South Asia, I contributed in practical conservation efforts like community mobilization, awareness campaigns, training of wildlife staff and park management. Although bears in Asia are highly threatened with a multitude of human impacts, I strongly believe that they can be conserved by a combination of approaches like building partnership with communities and management-oriented science.

I was introduced to IBA when I started looking at literature on bear species. The IBA has contributed greatly to my professional development by supporting my research and also introducing me to senior scientists. Bear are not adequately represented on the conservation agenda of Asian countries; therefore an active role of IBA which is growing as a global conservation organization is much needed.

I am associated with the Scandinavian Brown Bear Research Project and have served as a member of the IUCN SSC Bear Specialist Group since 2004. I would be honored to serve the IBA as a council member. I will work to increase the role of IBA in Asia, because IBA can play an important role by developing capacity of relevant organizations and influencing national conservation priorities towards bears’ conservation.

John Paczkowski

I would like to express my sincere interest in becoming a candidate for the IBA council and would consider the responsibility a privilege. Ever since becoming involved with bear research and management, 16 years ago, I have always been impressed with how accessible the IBA members and council are to students, wildlife professionals and members of the public. I would like to maintain and strengthen these relationships as a member of the IBA council both locally and internationally.

IBA Candidate Statements

Nominees for Council (2 positions)

My greatest asset to the IBA is my fluency in the Russian language and familiarity with Russian academic and government operational principles. Considering the vast numbers of bears in Russia and the numerous biologists doing research, the IBA can provide an excellent forum for a mutually beneficial exchange of information and skills across linguistic and political borders. From my experience with the Bear Specialist Group I understand that increasing international cooperation amongst bear biologists will only help to strengthen the network that makes up the IBA. I look forward to becoming more involved with the IBA as this organization evolves, and serving the members and council of the IBA.

Brian Scheick

I'm honored to be asked to run the IBA council and will serve to the best of my ability. I've been a member for nearly 12 years, where I've been on the web committee and assisted with the student sessions since its inception in 2005. Last year I ran for secretary and after the Monterrey meeting I took over as Student Coordinator. I moderate the new Truman discussion group and recently assisted with recruiting an IBA Intern/Volunteer Coordinator to help connect projects with those members seeking more experiences with bears. Hopefully this will expand to connect prospective experience and exchange program candidates.

I work for the Florida Fish & Wildlife Conservation Commission as the Assistant Coordinator for the Bear Research Program and have worked on American black bears since 1996. Much of this work has focused on habitat, population estimates, interactions with roads, human-bear conflicts, and developing a management plan.

The IBA's strength comes from its global membership with expertise on all bear species. I hope the recent increase in cooperation with the Bear Specialist Group continues and expands. We are the leading scientifically-based bear research and management organization and I think the IBA should continue providing policy makers with sound science. I support attempts to increase membership in those under-represented countries that have bears. Whether or not I win the council seat, I look forward to future conferences where I can meet with more of our dedicated and diverse membership from around the world.

Andreas Zedrosser

The first bear conference I attended was in 1997 in my native Austria and, with the exception of the Japan conference in 2005, I have attended every IBA conference since. I have become involved into the IBA through the student forum by planning and organizing student meetings, student housing, and other student activities. Now I have been asked to run for the IBA Council and have accepted, because I am willing to take this involvement one step further. I am strongly committed to science-based conservation and management of bears worldwide and the role that IBA plays in achieving these goals.

The IBA is the world's foremost source of science-based information about bears. It has been and still is successfully contributing to the management and conservation of bears in North America. New challenges for bear conservation and management are emerging, involving species and regions that have not yet been well studied. I believe it is very important to keep focusing on our traditional member and information strongholds in North America and Europe, but it is also crucial for the development and the influence of the IBA on the international level to increase its involvement and membership in especially Asia and South America. Since my first conference in 1997 I have also witnessed that the IBA has made significant scientific progress. Members are gaining and distributing scientific information about lesser-studied bear species and developing new technological and analytical tools. I strongly believe in and will work for the distribution, sharing, and access to this knowledge and expertise through different organs of the IBA.

I have worked for several years as a bear manager in Austria, thereby gaining experience "on the ground", and I have contributed to the development of the Austrian Brown Bear Management Plan. Since 2001 I have been working in Sweden and Norway with the Scandinavian Brown Bear Research Project. I have worked on various aspects of brown bear life history and ecology and finished my PhD in 2006. Since then I am working as post doctoral researcher, continuing my research on bear life history and behavioral ecology, but also expanding more into the conservation and management of small bear populations. I believe that I can contribute to the IBA's scientific and conservation goals through a mix of enthusiasm and experience.

Bylaw Amendments

(Approved by Council on 24 March 2008 as Interim Bylaws)

Additions to the Bylaws are underlined and shown in bold, whereas deletions have a double strike-through line. Only Articles and Sections with changes are shown.

International Association for Bear Research and Management, Inc.

Bylaws and Organizational Structure

(Last revision: 24 March 2008)

Article I. Description

Section 6. Official Language

English shall be the official language of all IBA proceedings and newsletters.

Article II. Membership

Section 7. Code of Ethics

IBA members are expected to adhere to the highest standards of ethics in working to achieve bear conservation—locally, regionally, or globally. Members are expected to strive towards accomplishing IBA's purposes, goals and objectives through commitment to excellence in bear conservation, while maintaining accountability, transparency, integrity, honesty, and responsible stewardship of resources important to bears.

Article III. Organization

Section 1. The Council

In order to carry out its objectives, the IBA shall be governed by a Board of Directors called the Council. The Council shall consist only of volunteers. To the greatest extent permitted by law, "Good Samaritan" laws and principles apply and Council and its members shall not be legally liable for any actions related to activities of the IBA. Council members shall discharge his or her duties (1) in good faith; (2) with care an ordinarily prudent person would exercise under similar circumstances; and (3) in a manner that will be in the best interest of achieving IBA's goals and objectives for bear conservation.

Section 3. Quorum

Two-thirds of the Council membership shall constitute a meeting quorum for the transaction of Council business when meeting at any conference or workshop. ~~In the event that any member of the Council is unable to attend a meeting, that member is authorized to appoint any qualified regular member of the IBA as his/her alternate, provided that the absent Council member has notified the president in writing that the alternate can explain the absent member's views and vote on pre-announced business.~~

Section 4. Duties

Council business will be conducted at meetings in conjunction with IBA conferences or workshops. With the exception of such meetings, **because Council members reside around the world where time zones make it difficult to communicate simultaneously by teleconference, most business will be conducted by email.** ~~conducted through electronic means.~~ The Council shall enact policies and procedures to further the objectives of the IBA as stated in Article I, Section 2, but must comply with Article VII. The Council shall, by majority vote of a quorum, fill vacancies for unexpired terms in its membership; develop further objectives and policies of the IBA; organize the structure and function of all publications; and recommend changes in the IBA to the members. The Council shall be responsible for actions taken by the IBA on public issues. The Council may be responsible for writing, proposing and amending the IBA Bylaws, and for presenting them to members of the IBA for approval, subject to Article VIII.

Section 5. Transparency and Accountability

To provide for transparency of Council actions that relate to IBA's goals, objectives, or programs to achieve bear conservation, Council decisions and policies will be reported to association members through IBA's serial publication, *International Bear News*, or on the IBA website. The Secretary will maintain a record of all Council decisions or policies.

IBA will make information about its operation, governance, finances programs and activities widely available to IBA members during member meetings at conferences, on the IBA website, or in *International Bear News*.

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An accounting of IBA's achievements and progress towards bear conservation around the world will be provided on a quarterly basis in International Bear News and on the IBA website. A similar evaluation and review of progress in implementing IBA's mission, programs, and activities will be presented at all members' meetings, to make sure that they advance the state of bear conservation and make prudent use of IBA's resources.

Section 6. Conflict of Interest

All potential conflicts of interest, or the appearance of conflict of interest, between the interests of IBA and personal interests of any Council member will be avoided or appropriately managed through disclosure, recusal or other means. A signed statement disclosing any such potential conflict of interest is required before a Council member takes office and at the beginning of each calendar year that the member serves in that capacity. No punitive action will be taken against any IBA member who reports violations of any IBA Bylaw, policy, goals or objectives by a member of Council.

Section 7. Compensation for Council Members

Council members will serve on a voluntary basis without compensation, other than reimbursement for expenses incurred to fulfill Council duties. In the event that a Council member applies for a travel grant to attend an event or to give testimony critical to bear conservation or to IBA, the same stipulations and limitation that apply to any members for dispersal of travel grants will apply. No loans of IBA funds to any Council member is allowed.

Article IV. Officers

Section 5. The Treasurer

The Treasurer shall be responsible for all funds of the IBA. The Treasurer shall keep accurate books concerning expenditures and receipts of IBA's funds, maintain the IBA checking account, handle investments, pay bills, receive payment for dues and publications, process credit card payments, arrange for preparation and filing of tax returns, maintain the IBA's US tax-exempt status, issue checks to selected projects as directed by the Chair of the IBA's Research and Conservation Grants Committee, maintain all financial records, and bill for

page charges for IBA's journal, *Ursus*, as needed. To provide oversight and security of the IBA treasury, records of monthly income and expenses will also be provided to the IBA Secretary, and an annual accounting provided to all members of Council. The Treasurer will follow IBA Bylaws and Council policies for payment or reimbursement of expenses are incurred by anyone conducting Council-approved business or travel on behalf of IBA. An accounting of such expenses will be made available to all Council members and be included in the Treasurer's report at periodic members' meetings. In order to maintain IBA's non-profit, tax-exempt status in the US, the Treasurer must be a US citizen. The Treasurer may delegate or contract some of the duties to others with the concurrence of the President. The Treasurer and President will arrange for an audit of the IBA's financial records following completion of his/her term and will make this audit available for review by members at IBA membership business meetings.

Section 6. *Ursus* Editor(s)

The editor(s) of the IBA's journal, *Ursus*, shall be selected by the Council and appointed by the President. The editor(s) shall serve with the concurrence of the Council. The editor(s) will be an ex-officio member(s) of Council without voting privileges, and will act as an advisory to Council in publication matters. Editors may overlap in their ~~time in~~ **terms of** office.

Article V. Procedures

Sturgis' Rules of Order will be used unless they conflict with ~~the IBA's Bylaws~~ the IBA's Articles of Incorporation or these Bylaws.

Article VI. Elections

Section 2. Nominations

Six months prior to the conference held in the Americas, the President shall appoint a Nominating Committee. The Nominating Committee shall provide the Secretary with the names of at least one and usually two regular members as nominees for each office and at least one name for each Council seat to be filled in the upcoming election, as specified in Section 1 of this Article. Incumbent officers may be renominated for the Council, subject to Section 3 of this Article. The Nominating

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Committee's list of nominees will be provided to the Secretary in time to allow publication in an issue of International Bear News prior to election. The Secretary will compile the list of nominees received from the Nomination Committee along with any additional nominations. Additional nominations will be accepted by postal mail or email from any member up until 65 days prior to the conference. Any nominator must certify that nominees are members, have agreed to run for office, and have agreed to serve if elected. All nominations received will be placed on a ballot and circulated to IBA members in the Newsletter, by mail, by email or on the IBA webpage. **Similar procedures will be followed for councillors or officers elected in conjunction with conferences held in Eurasia. In the event that circumstances do not allow a conference to be held on schedule in conjunction with a conference, Council will set a date for election to comply with the 3-year terms as described in Section 4 of this Article.**

Section 3. Balloting

The election of all members of Council shall be by mail or internet ballot. Ballots will be provided in a Newsletter, in a separate mailing, or via secure internet before the appropriate Conference. Ballots will be accepted by the Secretary or other presidentially appointed official until ~~8:00 pm~~ **Midnight GMT** the day before the opening of the next conference **or, in the event that a conference is not held on schedule, at a date selected by Council.** Ballots will be accompanied by candidate statements which may be subject to length limitations. At the IBA meeting, members of the Nominating Committee who are present, or other members appointed for this purpose, will open and tabulate all paper ballots in addition to those received electronically by the Secretary. The nominee receiving the largest number of votes for each office shall be elected. The five (six) Council nominees with the largest number of votes shall be elected to Council. In the event of a tie, the presiding Council shall immediately vote by secret ballot to decide the winner. The results of the election shall be reported at the opening of the business or members meeting at the conference and in the first Newsletter following the election. **In the event that a conference is not held on schedule, election results will be announced in the next newsletter following the election and on the IBA website.**

Section 4. Tenure of Office

All elected members of Council shall be installed at the business meeting held in conjunction with an Americas or Eurasian conference. The Vice President (Eurasia) and two elected Councillors shall be installed at the Eurasian conference; all other elected Officers and Councillors will be installed at the conference held in the Americas. All elected Officers and Councillors and the past president shall serve a term of approximately 3 years, usually until at the next triennial conference, **subject to Sections 2 and 3 of this Article, but in any event until their successors are chosen.** All elected Officers and Councillors are limited to two consecutive terms in a particular office.

Section 5. Vacancies

Vacancies within the Council that may occur during the 3-year term between conferences shall be filled from the membership by a majority vote of a plurality of Council, or at the Council's discretion, a special election may be held instead. The new Council member shall serve ~~until~~ **the next regular election held for the position vacated the balance of the term to which their predecessor was elected.**

Article VIII. Bylaws and Resolutions

Section 1. Bylaws

The workings and organization of the IBA shall ~~include~~ **only those listed in these Bylaws be governed by these Bylaws.** Copies of the Bylaws shall be available on the IBA website or to any member upon request to the Secretary.

Section 2. Amendments to the Bylaws and Resolutions.

Resolutions or bylaws amendments may be submitted by any IBA member during the IBA business meetings or to the president at any time. Proposed resolutions or bylaws changes will be published in the Newsletter and/or sent to members by email to provide for discussion and to ask members to submit viewpoints. Representative viewpoints which are submitted to the Secretary in a timely manner and subject to length limitations, will be published in the following newsletter, distributed to members by mail or email, and/or posted on the IBA website. Ballots for the resolution or bylaw change will be provided with the newsletter that includes the representative viewpoints, by separate mailing, or via

Bylaw Amendments

Internet. **Passage will require that at least 10% of members cast ballots and at least 2/3 of those vote in favor of the measure.**

To accommodate resolution of important issues in a timely manner that is not specifically addressed in the Bylaws, the Council may, by a two-thirds vote, establish interim Bylaw amendments, that will remain in effect until ratified or rejected by member ballots. Such interim amendments must be published in the next Newsletter or distributed to members by mail or email and be ratified by a two-thirds majority of **votes cast by at least 10% of members eligible to vote.** returned ballots:

To facilitate open discussion by members, on proposed amendments to IBA Bylaws or proposed IBA Resolutions, representative viewpoints of members, if available in a timely manner, will be posted on the IBA webpage, International Bear News, or distributed to members by other means. In order to be counted, ballots must be received by the Secretary within 30 days of distribution of representative viewpoints to members.

Article IX. Publications

Section 1. Publications

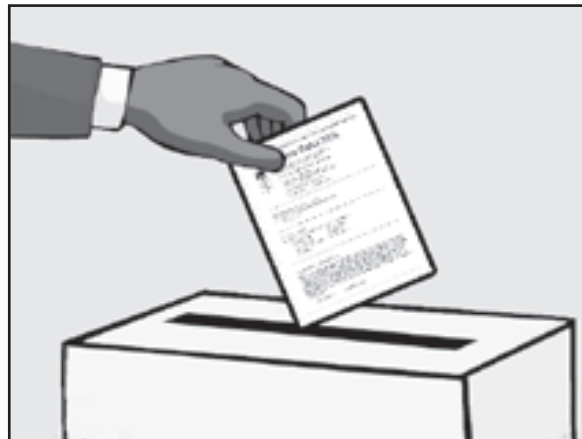
The IBA shall issue an annual journal, titled *Ursus*, which includes those papers submitted at conferences that are reviewed by peers and accepted by the appropriate IBA editor(s). In addition, at the discretion of the editor(s) and Council, a policy may be adopted to

allow inclusion of additional peer-reviewed papers in the journal that are submitted to the editor(s) but not presented at conferences. The IBA shall also publish a serial Newsletter, titled *International Bear News*, that reports on IBA and Affiliate group news, scientific articles, current literature, conservation problems, educational issues and research. ~~English shall be the official language of all IBA proceedings and newsletters.~~

Section 3. Funding

The funding of IBA publications shall be directed by the Council; normally a Conference fund-raiser may be selected. **Contributions to IBA bear conservation funds, projects, or other programs must be used for the purposes described in any relevant solicitation materials, in the way specifically requested by the donor, or in the manner that reflects the donor's intent. Donors will be provided with a clear accurate acknowledgment of charitable contributions that will facilitate any relevant compliance with tax law requirements. No gifts will be accepted that compromise bear conservation or the ethics, financial circumstances, or objectives of IBA.**

IBA will respect the privacy of individual donors, and except where disclosure is required by law, and will not sell or otherwise make available the names and contact information of its donors without providing them an opportunity at least once a year to opt out of the use of their names.



PLEASE VOTE!



Figure 2. Andean Bear track in ACP Huiquilla.

© Marco A. Enciso

(... continued from page 16)

While the objective of this study was to find frogs, I was seriously interested in finding some bear sign, tracks or maybe seeing one. According to population studies on the Andean bear in Amazonas, the bear is found in all the provinces of Amazonas; however, the Luya province shows the smallest percentage (3.9%) of potentially suitable habitat for the bears (Figure 1) and the area of Lónguita is not considered as potentially suitable bear habitat (Amanzo et al. 2007). Hence, we set out to find out whether there were bears in the area.

During January, we had the opportunity to find scratches on trees and remains of bromeliads (apparently used by bears) and a track close to

our campsite (Figure 2). The most important moment was at the beginning of February when, approaching a pasture area at 3600 m (78°01'W, 06°20'S), we spotted an adult male Andean bear 20 m from us. When he saw us, he ran for cover in the forest (Figure 3). Since spotting this bear, we were able to confirm the presence of other bears. What is special about this sighting is the fact that, generally, Andean bears' habitat has specific altitudinal delimitation. On very few occasions, studies done in Perú mention sightings of bears above 3200 m. It is also important to know that the bears are found in this area, because with the exception of ACP Huiquilla, the neighboring areas are dedicated to agricultural and livestock rearing uses and there is great fragmentation and destruction of forests. I was able to talk to some people in Choctamal, Longuita, who told me how some times they have seen bears predate on livestock, a kind of conflict that needs to be addressed.



Figure 3. Habitat of the Andean bear Oso Andino in Lónguita, Amazonas, from 3500 m elevation. You can see the transition from 'pajonal' to mountain forest.

© Marco A. Enciso

We are beginning a study to understand the ecology of the Andean Bear and will follow as an example existing studies like the one Robyn Appleton is doing in Lambayeque, Perú (Appleton et al. 2007). We will combine it with an environmental education plan in the neighboring communities. We hope that soon we

will be able to report on progress on the conservation of the Andean bear in the northeast of Perú.

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Southwest U.S.A. and Mexico

News from Southwest USA and Mexico reported by:
Bonnie Reynolds McKinney

New Tex/Mex Study: Transboundary Movement and Habitat Use by Black Bears (*Ursus americanus*) in the Chihuahuan Desert of Western Texas and Northern Coahuila, México

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American black bears (*Ursus americanus*) are listed as state “Threatened” (west of I35) in Texas, and “Endangered” in Mexico. Black bears were extirpated from Texas by the 1950s, likewise, populations drastically declined in Mexico with remnant populations remaining in a few isolated mountain ranges in northern Coahuila and Chihuahua. In the 1990s, black bears began slowly recolonizing areas of the Trans-Pecos in western Texas through dispersal from adjacent Coahuila, Mexico. The connectivity of dispersal corridors, habitat selection during dispersal, and mortality factors for immigrating and emigrating black bears in the borderlands of both countries needs further study to manage this species in metapopulations and core populations on a state and international level.

Our objectives are to: (1) determine dispersal corridors of emigrating and immigrating black bears in west Texas on the Texas Parks and Wildlife Departments Black Gap Wildlife Management Area (BGWMA) and the El Carmen Land and Conservation Company, LLC, Adams Ranch Division ; (2) coordinate field work on an international level with the El Carmen

black bear study in Coahuila, and on a local level in Texas with landowners, Big Bend National Park (BIBE) and BGWMA; (3) investigate habitat selection, home range, diet, reproduction, and seasonal movement of resident black bears on BGWMA and El Carmen-Adams Ranch; (4) determine mortality factors during dispersal for Mexico and Texas, and develop corridor management plans for west Texas and northern Coahuila; (5) determine the importance of artificial water sites (wildlife guzzlers, tanks, troughs) to resident and dispersing black bears in a lower Chihuahuan Desert habitat; (6) continue genetic work with mtDNA samples; and (7)



provide necessary training on capture, handling and transport of black bears to Texas Parks and Wildlife Departments employees needing hands-on experience.

The duration of the study will be for two years beginning in September 2008; and will be located on the BGWMA, and the Adams Ranch Division of El Carmen Land and Conservation Company, LLC in the Trans-Pecos of western Texas. Both areas are located on the edge of the Mexican Highlands Province in the southeastern portion of Brewster County, Texas adjacent to the state of Coahuila, Mexico in typical Chihuahuan Desert shrub habitat. Black bears will be captured, radio collared and tracked by aerial

and ground telemetry. In Coahuila, the Maderas del Carmen black bear research team will also be continuing field work using the same methods in the northeastern part of the Maderas del Carmen/Sierra del Carmen range. Movement across the international border will be coordinated by both research teams. Movement data and habitat use will be analyzed using Geographical Information Systems (GIS) software, ArcGIS 9.3. Radio telemetry locations on bears will be entered in the GIS where movements, home range, and habitat selection will be analyzed.

This research project will increase knowledge of black bear distributions,

movements and corridor use in western Texas and adjacent northern Coahuila, Mexico. Without dispersal from northern Coahuila, black bear populations in western Texas will not continue to reestablish because Coahuila, particularly the Maderas del Carmen is the core population and the closest viable

population of black bears to the meta populations that have recolonized in BIBE and BGWMA. Corridor protection in Mexico is an ongoing priority of El Carmen Project, information on dispersal of black bears from west Texas to Mexico will also provide important habitat information and aid in the selection of lands to be purchased for further corridor protection as well as delineate important corridors in western Texas for expansion of the metapopulation on BGWMA. Information obtained on ecology parameters will further TPWD knowledge in western Texas to enhance management on state as well as private lands. This project will also highlight the need for cross-border

collaboration in natural resource conservation. Conservation and research initiatives are often restricted by political boundaries because of cross-border challenges. Large-scale ecosystems such as those used by black bear often include habitats that cross political and international boundaries, and must be addressed as contiguous not separate ecosystems. Our study will integrate western Texas and northern Coahuila, Mexico black bear populations to understand population dynamics, habitat and movement of an umbrella species in contiguous habitat in two countries.

Cooperators on the project are Borderlands Research Institute, Sul Ross State University; Texas Parks and Wildlife Department; El Carmen Land and Conservation Company, LLC-Adams Ranch (CEMEX); Proyecto El Carmen, Mexico (CEMEX); and Secretaria de Medio Ambiente Recursos Naturales (SEMARNAT) Mexico.

Funding sources include the National Science Foundation, El Carmen Land and Conservation Company, LLC, Adams Ranch, Texas, (CEMEX), Proyecto El Carmen, Coahuila, Mexico (CEMEX), and in-kind services, Texas Parks and Wildlife.

Connecting the Dots:

Ron Thompson, Arizona Game and Fish reported a new study slated for the Arizona/Mexico borderlands.

Genetic Connectivity of Sky Island Carnivores

Investigators:

Kirby Bristow, Arizona Game and Fish Department

Dr. Julie Young, Wildlife Conservation Society

Dr. John Beckmann, Wildlife Conservation Society

This project will take place along the Arizona/Mexico border during the time frame of 1 June 2008 to 31 May 2009. The scope of the work will be to perform genetic analyses of hair samples collected from non-invasively

sampled black bears, mountain lions, jaguars, and ocelots by personnel and collaborators associated with the Arizona Game and Fish Department and Wildlife Conservation Society during 2008. DNA will be extracted and genotypes will be obtained from a total of 12 microsatellite loci for each sampled individual. Statistical analyses will be performed using genetic data obtained from these samples to address the following objectives: (1) to determine whether genetic subdivision exists among black bears and mountain lion populations inhabiting fragmented habitats along the Arizona-Mexico border; (2) to document the occurrence and gather baseline genetic data for ocelots and jaguars inhabiting fragmented habitats along the Arizona-Mexico border; (3) to evaluate levels of genetic diversity within and among focal carnivore populations along the Arizona-Mexico border; (4) to evaluate levels of relatedness among focal carnivores within putative subpopulations inhabiting fragmented habitats along the Arizona-Mexico border; and (5) to evaluate levels of gene flow among putative subpopulations of black bears and mountain lions inhabiting fragmented habitats along the Arizona-Mexico border.

Demographics include determining sex ratios of focal carnivore populations inhabiting fragmented habitats, and determining the relative abundance of focal carnivore populations associated with hair-snag or rub-pad sampling grids distributed along the Arizona-Mexico border.

Results from this study will provide a report of sample sizes, field and genetic methods, and statistical analyses used to estimate genetic and demographic parameters associated with the putative carnivore populations sampled along the Arizona-Mexico border; and through interpretation and discussion of the results special attention will be given to the importance of conservation implications of erecting impermeable and semi-permeable border fencing. 🐾

Northern Divide Grizzly Bear Project Releases Results

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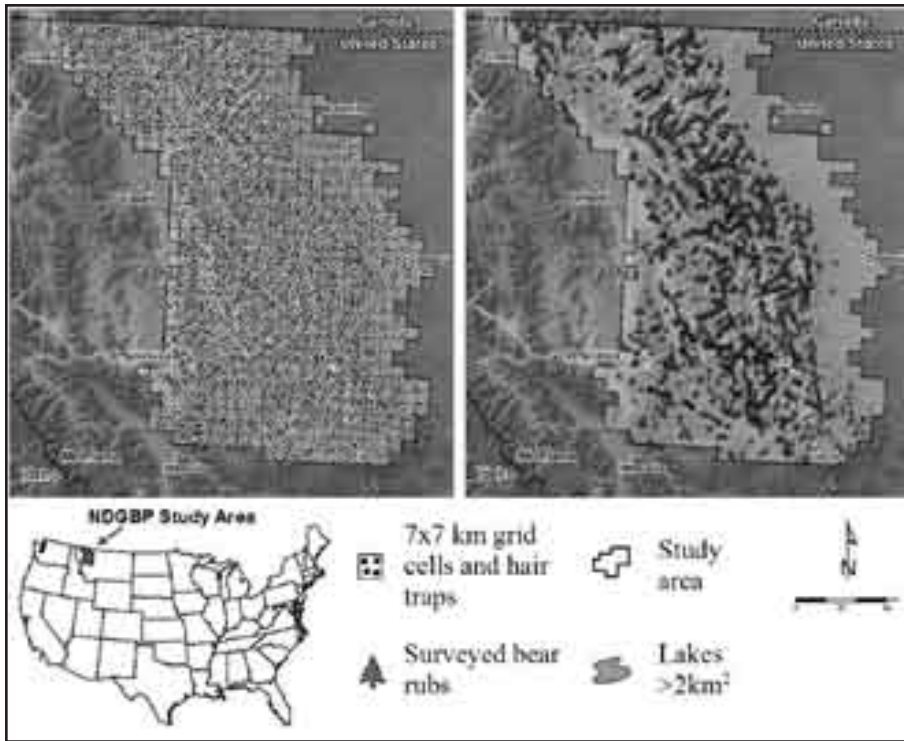
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We released the primary results of the 5-year Northern Divide Grizzly Bear Project in September. The goal of this U.S. Geological Survey-led project was to determine the abundance, distribution, and genetic health of the grizzly bear population (*Ursus arctos*) in a 31,410 km² (7.78 million acre) study area in northwestern Montana, USA (map). Our study area represented all U.S. lands occupied by grizzly bears associated with the Northern Continental Divide Ecosystem (NCDE) Recovery Zone.

We used two concurrent noninvasive sampling methods, hair traps and bear rubs, to collect bear hair for genetic analyses. We systematically distributed 2,558 hair traps throughout the study area using a grid of 641 7x7 km cells (photo). We also conducted over 18,000 visits to 4,795 bear rubs found across 80 percent of the study area. Bear rubs are objects such as trees, posts, and power poles that bears naturally rub on; no attractant was used to draw the bears to these sites (photo).



Northern Divide Grizzly Bear Project study area in northwestern Montana, USA, 2004.

From June to September of 2004, 210 field technicians collected 33,741 grizzly and black bear (*U. americanus*) hair samples. Genetic analysis of hair samples at 7 microsatellite loci identified 545 unique grizzly bears (238 M, 307 F). We also genotyped tissue samples from grizzly bears handled in the NCDE during research and management activities. This effort brought the total minimum number of grizzly bears documented in the NCDE in 2004 to 563 (242 M, 312 F).

To estimate the total number of grizzly bears in the NCDE, we developed a mark-recapture modeling approach that combines data from our three sampling meth-

ods (bear rubs, hair traps, and live captures) to construct individual bear encounter histories. This approach was an extension of our recent research (Boulanger et al. 2008, Kendall et al. 2008) and could be used with a variety of sampling methodologies for other populations or species. Using this approach we estimated the



Grizzly bear with cub at a barbed wire hair trap in Glacier National Park, Montana, USA..

2004 population at 765 grizzly bears (CV = 3.8%).

Beyond estimating abundance, we used our data to evaluate genetic population structure. Genetic diversity approached levels seen in relatively undisturbed populations in northern Canada and Alaska, suggesting that this population has not experienced a severe genetic bottleneck. Factorial correspondence analysis of 15 microsatellite loci indicated that there are currently no severe anthropogenic fractures in the NCDE grizzly bear population. Nevertheless, gene flow across part of the study area has begun to slow down suggesting that the population may be fragmented with increasing traffic volumes and development. Employing all available data sources, we also found that grizzly bear range now extends approximately 10,000 km² (2.6 million acres) beyond the NCDE recovery zone boundary. However, density varied greatly, with the highest densities found in Glacier National Park in the north, with far fewer bears identified at the eastern and southern periphery.

This study provides the first rigorous, ecosystem-wide estimates of grizzly bear abundance, distribution, and genetic structure for this threatened population. Our results provide benchmarks for ongoing and future research efforts, and will aid managers in assessing progress towards recovery. Further details about the project along with remote video demonstrating our methods can be found on our website (<http://nrmsc.usgs.gov/research/NCDEbeardna.htm>). The complete results of this study will be published in the January 2009 issue of *The Journal of Wildlife Management*.

Acknowledgements

We thank the hundreds of employees and volunteers who conducted field work under difficult conditions, entered reams of data, and processed thousands of hair samples. We also thank the following agencies that provided

substantial financial, logistical, and in-kind support: Blackfeet Nation; Confederated Salish and Kootenai Tribes; Montana Department of Fish, Wildlife, and Parks; Montana Department of Natural Resources and Conservation; National Park Service; Northwest Connections; U.S. Bureau of Land Management; U.S. Fish and Wildlife Service; and the University of Montana.



Grizzly bear rubbing on a tree in Glacier National Park, Montana, USA.

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Northeastern United States and Eastern Canada

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Northeast Black Bear Technical Committee Annual Meeting

The annual meeting of the Northeast Black Bear Technical Committee (NEBBTC) was hosted by the Ontario Ministry of Natural Resources (OMNR) and was held July 14-17, 2008, at the Harkness Laboratory of Fisheries Research on Lake Opeongo in Algonquin Provincial Park. The NEBBTC functions under the oversight and guidance of the

Northeast Wildlife Administrators' Association (NEWAA) as authorized by the Northeast Association of Fish and Wildlife Agencies (NEAFWA). Jurisdictions in NEAFWA include Ontario, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland in eastern Canada, and Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, Washington D.C., and West Virginia in the northeast U.S.

Technical committees established by NEAFWA provide opportunities for networking, sharing ideas, and developing new concepts, and they produce outreach tools such as books, booklets, and white papers. Technical committees work on specific charges that are given by NEWAA. For example, the NEBBTC has been responding to the following charges:

1. evaluate aversive conditioning techniques for black bears,
2. develop a booklet for the public on black bear management options,
3. investigate the feasibility of developing a technical black



Attendees at the 2008 NEBBTC meeting
Rear, left to right: Jennifer Madden (NS), Peter Carter (ON), Randy Cross (ME), Harry Spiker (MD), Larry Bifaro (NY), Jim Cardoza (MA), Tony Nette (NS), John McDonald (USFWS), Martyn Obbard (ON).
Front, left to right: Kate Witherly (Dalhousie U.), Andrew Timmins (NH), Jeremy Hurst (NY), Jennifer Vashon (ME), Maria de Almeida (ON), Chris Ryan (WV), Mark Ternent (PA).



Chris Ryan, Jeremy Hurst, John McDonald, Andy Timmins, Jenn Vashon, Harry Spiker, and Randy Cross discuss the merits of the Cambrian College culvert trap design.

bear management booklet for wildlife managers,

4. provide annual jurisdictional bear harvest and management reports,
5. provide feedback to CITES representatives, and
6. identify potential committee charges for review and consideration by NEWAA.

Attendees at the 2008 meeting included Larry Bifaro (NY), Jim Cardoza (MA), Randy Cross (ME), Jeremy Hurst (NY), Jennifer Madden (NS), John McDonald (USFWS, and rep. of the NE Section, TWS), Tony Nette (NS), Martyn Obbard (ON), Chris Ryan (WV), Harry Spiker (MD), Mark Ternent (PA), Andrew Timmins (NH), and Jennifer Vashon (ME). Additional invited guests were Kate Witherly (Dalhousie Univ.) and Peter Carter and Maria de Almeida of OMNR's Wildlife Policy Section. Jen Vashon (ME) is the current chair of the NEBBTC, and Marty Obbard (ON) was the host for the meeting. Patrick Carr (NJ) was unable to attend the meeting in person, but he linked in by conference call on Tuesday morning to update the group on New Jersey's ongoing aversive conditioning study. During Pat's update, the group accessed the website of North Star

Science and Technology, the supplier of GPS collars for the study, to view locations of Pat's study bears in nearly real time (within about 30 minutes).

Apart from the 2-day business meeting that included informative jurisdictional updates and updates on the status of other charges, the group enjoyed an informal social and campfire on Monday evening, a presentation from Brad Steinberg, Algonquin Park Biologist, on the history of Algonquin Park and on bear management in the park on Tuesday evening, a trip to the Algonquin Park Visitor Centre and Museum on Wednesday afternoon, and a presentation by Rick Stronks, Algonquin Park's Chief Naturalist, on Algonquin's world renowned Public Wolf Howl on Wednesday evening. A wolf howl led by Rick later that evening was unsuccessful, but a more informal wolf howl during the Monday evening social did raise a response from a pack on the east side of Lake Opeongo! The group also had the chance to enjoy a paddle on Lake Opeongo using canoes and kayaks generously provided by Jerry Schmanda, Manager of nearby Algonquin Outfitters. The 2009 meeting of the NEBBTC will be held in conjunction with the Eastern Black Bear Workshop to be held in Minnesota. 🐻

Joint Disease and Its Management in Captive Bear Species

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As bearkeepers our knowledge of captive animal management is constantly improving and the animals under our care are living longer, and so we are increasingly faced with the problems of managing geriatric bear populations and their associated medical problems.

One of the biggest problems faced by aging bears is that of joint disease. Osteoarthritis, the commonest cause of lameness, is often caused by wear and tear on the joints, leading to erosion of the protective cartilage coating over the articular surfaces of the joints. The process of erosion is a painful one and may lead to swelling, inactivity and reduced use of the joint. Once the cartilage is damaged, inflammatory changes occur including deposition of new bone around the joint which may decrease the functional range of movement of the joint (joint fusion), meaning that the bear is no longer able to stretch or move as actively as before. These types of changes are common, not only in the limb joints, but also along the vertebral column of the spine, where they may not manifest specifically as lameness but instead as general inactivity. In addition to primary osteoarthritis, other joint problems in bears may include septic arthritis where infection of the joint has damaged the cartilage and caused secondary arthritis, traumatic injuries such as fractures, and nutritional or developmental problems which can cause poor joint conformation and lead to osteoarthritic change.

Osteoarthritis is often insidious and develops over a number of years. Rather than specific lameness, keepers may notice that a bear becomes less

active, sleeps more, climbs less and is generally slower or more irritable than before. Joint problems can be minimised by the provision of a well balanced diet that supports joint development, sensible weight monitoring, and adequate exercise facilities that build muscular strength and allow joints to be used appropriately. The restrictive captive environment in which some bears are kept may contribute to the degeneration of their joints, and so it is vital that enclosures, which allow for the expression of natural behaviours are provided in order to maintain both physical and mental health. Enrichment programmes that encourage climbing or swimming allow bears to engage in naturalistic behaviours.

Obesity and mobility issues are common in captive bears and these two issues go hand in hand. Reducing weight obviously reduces the load carried by joints and maintenance of a healthy weight is an essential technique in preventing and managing lameness. As bears are very food motivated animals, any reduction in diet should be carefully monitored to prevent aggression occurring within a group of bears, and should ideally be timed with a natural seasonal reduction in food e.g. late winter. Even very simple changes to diet and enrichment items can have big impacts on weight e.g. increasing amounts of vegetables

fed, reducing amounts of high-fat or high-sugar enrichment items such as peanut butter or jam. Bears can easily be trained to stand on a weigh plate that allow their weight to be accurately recorded and it is worth remembering that seasonal fluctuations in weight are normal. Visual assessment of body condition score is an important tool in monitoring weight changes and determining what weight is appropriate for a particular bear's frame.

However even if factors such as diet and exercise are monitored and adjusted appropriately, bears may still develop osteoarthritis (OA) as they age. A number of therapies may be utilized in the treatment of OA. For mild symptoms or as a prophylactic treatment, nutraceutical therapy may be helpful. Supplements containing glycosaminoglycans (GAGs) provide the 'building blocks' of cartilage and can theoretically help to prevent or repair inflammation within the joint. Some studies have found GAGs to be effective and anecdotal evidence in relation to veterinary patients is promising. However their application in animals such as bears has not yet been quantified and thus their chondroprotective effects are currently unknown. GAGs are added to a number of prescription pet foods in the UK and are commonly used as supplements. In the USA the FDA has

yet to approve the addition of GAGs to animal feed, although their use as human supplements is unregulated.

Non-steroidal anti-inflammatory drugs (NSAIDs) are commonly prescribed for osteoarthritis or general pain relief. This class of drugs works by dampening down the body's natural inflammatory response through inhibition of enzymes known as COX 1 & 2. Side effects caused by the inhibition of COX 1 may include gastrointestinal signs such as vomiting or diarrhea, stomach ulceration or increased stress on the kidneys. In general, although no specific clinical trials have been conducted on bears, these side-effects appear to be rare. Newer brands of NSAIDs select preferentially for inhibition of COX 2 rather than COX 1 thus reducing the risk of side effects. NSAIDs are extremely effective against osteoarthritic pain and generally safe even when used for long periods. Different bears respond differently to different types of NSAID. For example at the China bear rescue centre we use Carprofen, meloxicam and tepoxalin on different bears depending which drug they respond to best. A medication-free gap should always occur when switching between different types of NSAIDS, to reduce the risk of side-effects from combined drug interaction.

Steroids are sometimes used in the management of mobility disease,

Class	Drug	Species	Dose
NSAID	Carprofen	Asiatic black bear	2 - 4.4mg/kg p.o., s.c., s.i.d.
	Meloxicam	Brown bear	0.5mg/kg s.c. followed by 0.1mg/kg p.o., s.i.d.
		Asiatic black bear	0.2mg/kg p.o. followed by 0.1mg/kg p.o., s.i.d.
		Andean bear	0.2mg/kg p.o, s.I.d.
	Tepoxalin	Asiatic black bear	20mg/kg p.o. s.I.d. followed by 10mg/kg p.o., s.i.d.
Steroids	Prednisone	Polar bear	25 - 80mg p.o., s.i.d. for treatment of allergic dermatitis with noted improvement in mobility also.
	Prednoleucotropin	Asiatic black bear	1 tablet/16kg p.o., b.i.d.
Tramadol	Tramadol	Asiatic black bear	4mg/kg p.o., b.i.d.
Nutraceuticals	Glucosamine/ Chondroitin	All bear species	Used in combination, preferred ratio of 500mg glucosamine: 400mg chondroitin, dose according to manufacturers instructions and scale up to appropriate dose for weight.

Captive Bears

generally when the disease is caused by a neurological problem or where other therapies have failed. Steroids are generally not used as a first line treatment for chronic mobility disease as their potential side effects include those described above for NSAIDs plus increased risk of diabetes, liver disease etc. As well as be given by the oral route, steroids may be injected into arthritic joints when the bear is under general anaesthesia. Intra-articular steroid injection can provide short-term relief of arthritic pain until alternative management or drug therapies are initiated. Steroids should never be used concurrently with NSAIDs.

Although not an opioid, Tramadol binds to opioid receptors in the brain through an unknown mechanism and so provides similar analgesia to opioid drugs such as morphine. Tramadol can be used concurrently with both NSAIDs and steroids and can provide very effective additional analgesia. One of the main benefits of tramadol is that it appears to have minimal side-effects, however it should not be used with mood-enhancing drugs like selective serotonin reuptake inhibitors (SSRIs) such as fluoxetine (prozac) or monoamine oxidase (MAO) inhibitors.

Bears can be trained to take medications in a number of ways. Often the medication can be perceived as a reward and so if the bear is managed as a group, attention should be paid to potential conflict when the medication is offered. The most successful route in my experience is the use of fruit shakes (tablets blended with fruit and water +/- jam) offered from a plastic jug which the bear laps. For foul-tasting medication such as tramadol, tablets or

CONDITION SCORE 1

Pelvis and scapulae protruding, ribs easily palpated. Angular appearance, with no fat rounding out silhouette. A hollow will be noted between the pelvis and last rib showing virtually no fat.



CONDITION SCORE 2

Pelvis easily palpated, but good muscle covering over rump, ribs also felt on palpation, but having some muscle covering them. The hollow between the pelvis and last rib obvious, but softer.



CONDITION SCORE 3

Body is fully fleshed out. Obvious fat is present over pelvis and shoulders ribs not visually obvious, but palpable. The hollow between the pelvis and last rib is absent.



CONDITION SCORE 4

Bear has a rounded or blocky appearance, very well fleshed over all bony areas, obvious fat over the rump and shoulders. Ribs difficult to palpate. Caudal abdominal fat visibly hanging.



CONDITION SCORE 5

Legs appear too short for the body, rolls of fat on the neck and lower shoulders. Unable to palpate ribs. Caudal abdominal fat visibly hanging. Noticeably rounded rump.



Captive Bears

capsules can be stuffed into the centre of marshmallows which are then smeared in honey or sauce. The bears will generally swallow the marshmallows without chewing as long as the marshmallows are offered in quick succession (they're generally so eager to take the next one they swallow without chewing) if offered slowly the bears may chew the marshmallows and taste the tablets.

Special attention should be paid to the husbandry of elderly bears. Where possible, geriatric bear facilities should be providing with features such as non-slip flooring, low nesting areas, and sympathetically designed drains, steps, slopes etc that do not put strain on animals with poor mobility. Keeping staff should also be aware of the potential for sudden collapse in bears with mobility disease, if this occurs in a group situation then the collapsed bear may be mauled by

conspecifics who no longer recognize their housemate.

Finally, euthanasia is a sad but important tool for the management of bears with mobility disease whose welfare cannot be adequately maintained within a facility. The bear's quality of life should always be the primary consideration when making this decision; pre-emptive euthanasia is preferable to collapse or to chronic pain caused by inadequate management. When managing joint disease in bears, a comprehensive, holistic management approach is necessary to ensure the health and welfare of these stoic animals.

Further reading:

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www.wildlifeinformation.org

www.animalsasia.org,

www.bearkeepers@yahoo.com, personal communications

Student Forum

Students: ➤ Sign up Now for the Truman Google List Serve ◀

For Students Only

- Discussions pertaining to bear biology, management, or study design challenges
- Assistance with proposals and study design through IBA professionals
- Job searches, announcements, information regarding the IBA and student membership
- Planning for IBA student activities and meetings
- IBA membership is *encouraged* but is not required for initial sign-up

Instructions

- Visit www.bearbiology.com/iba/stu.html
- Follow the links to request an invitation
- If you're a new member, please submit a paragraph about your project and include your contact information so we can all get to know you

Other Important IBA Student Links

- www.bearbiology.com
- Global Bear Research Program Links page : www.bearkeepers.net/GraduatePrograms.htm



Book Review — *Bears: A Brief History*

David Mather
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Bears: A Brief History, by Bernd Brunner, translated from German by Lori Lantz, Yale University Press, New Haven and London (2007)

Bernd Brunner casts a wide net in *Bears: A Brief History*. He is clearly fascinated with his subject, and he introduces a diverse selection of topics. Most are about the associations between bears and people, although evolution, taxonomy, biology and conservation are also discussed. Perhaps it is unfair to complain about the brief presentation of some of these topics (especially since the title contains the word “brief”), but the shallow depth of some passages is a disappointment.

More troubling is the lack of citations to support many of the book’s more provocative statements. This is particularly difficult to understand in a book from a university press. It is a weakness shared by some other “Bears in Culture” books, particularly Paul Shepard’s and Barry Sanders’ *The Sacred Paw: The Bear in Nature, Myth and Literature* (Viking, 1985). Like *The Sacred Paw*, however, *Bears: A Brief History* is an informative and entertaining book. If anything, my disappointment about the lack of citations is because the book is so good otherwise.

The book contains sixteen chapters, plus an introduction and epilogue. Portions of the early chapters draw heavily on Björn Kurtén’s *The Cave Bear Story* and David Rockwell’s *Giving Voice to Bear*. The book soon begins to show its unique value to North American readers, however, with perspectives on cultural connections to bears in northern and eastern Eurasia. Much of the source material for these chapters is in German (and to a lesser degree, French), so Brunner provides a useful portal into literature

that is not easily accessible to English-only speakers.

Table of Contents:

- Introduction
- 1. Tracking the Paths of Bears
- 2. Transformations
- 3. The Mystery of the Cave Bear
- 4. False Steps
- 5. Exotic Discoveries
- 6. The Bear’s Personality
- 7. Sounds, Senses, Signals
- 8. Bears as Pets
- 9. An Observer in Eastern Siberia
- 10. Face to Face
- 11. Hunters and Hunted
- 12. The Inuit and Polar Bears
- 13. Closer than Close
- 14. Bears on Show
- 15. Bear Substitutes
- 16. “Bearanoia”
- Epilogue

With such a wide range of subjects, each reader will gravitate to their own interests. Readers new to bears will find a good introduction, although it is short on the methods and goals of modern bear biology.

I have read broadly on the anthropology of bear ceremonialism, and I was pleased to find new material here for my research. Brunner summarizes the exploits of Leopold van Schrenck and Carl Maximowicz in eastern Siberia, in the late 1850s. Van Schrenck participated in the bear festival of the Gilyak people. This was an elaborate ceremony, which involved keeping bears captive for some length of time, and then parading them around the village over the course of several days and nights. The bears were killed when being brought back from the frozen river, followed by a village feast lasting for weeks. The skins and skulls of the bears were displayed at the ceiling of one of the lodges, and later stored in a place of honor within. This ceremony is similar in many respects to that of the Ainu, and is therefore one of the more complex versions of the bear feast. Intriguingly, Brunner closes the chapter by noting that von Schrenck was not able to witness significant portions of the ceremony – in particular, he did not see what occurred during the feast itself or how the bones of the bear were disposed of. Von Schrenck wrote that these

activities “were undertaken in secret, or at least not in the presence of strangers.”

Brunner takes a significant departure from other books in this genre with his chapters on early bear studies, the development of zoos in Europe, circuses and animal performance arenas, and teddy bears and other bear toys. In these areas again, Brunner’s access to German source material provides a unique perspective.

Brunner provides a fascinating perspective on macabre arena fights between bears and other animals (and sometimes humans) in contexts ranging from the Roman empire to medieval European “bear gardens” to Nazi concentration camps. He discusses the trained bear circus acts in nineteenth and early twentieth century Europe and America, including celebrities such as Ursula Böttcher, the “Brilliant Baroness of the Bears” in the 1960s.

While the presentation of modern bear biology is relatively thin, rarely extending beyond bear attacks and prevention, Brunner presents an excellent historical context of the field’s development from the eighteenth to the early twentieth centuries. As one example, Brunner mentions that the phenomenon of delayed implantation was proposed in 1882 by zoologist G. Herbst, and later by G. W. D. Hamlett in 1935, but was not proven until 1963 by L. Dittrich and H. Kronberger. Returning to my earlier complaint, however, none of those people or their work are cited in the bibliography.

The images throughout Brunner’s book range from astonishing to entertaining. A few appear to be irrelevant to the text, but are not distracting. One intriguing example is an image from the sixteenth century of knights in armor grappling with bears.

Bears: A Brief History is a rich book, despite the thin bibliography and index, and I have only touched on much of its potential. It is a unique and valuable contribution to the growing library of “Bears and Culture” books. 🐾

Recent Bear Literature: November 2008

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Thiemann, G. W., R. Stahl, Baruchmordo and S. W. Breck. 2008. Trans fatty acids provide evidence of anthropogenic feeding by black bears. *Human-Wildlife Conflicts*¹ (2):183-193.

¹ *Human-Wildlife Conflicts* is a referred journal, rather than peer-reviewed. It may be one with which you are unfamiliar, as it is new. 📖

20th Eastern Black Bear Workshop: Announcement and Call for Papers

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The 20th Eastern Black Bear Workshop (EBBW), will be held April 26-29, 2009, in Grand Rapids, Minnesota, USA. It is being co-hosted by the Minnesota Department of Natural Resources (DNR), the Wisconsin DNR, and the Manitoba Department of Conservation.

The workshop will focus on putting to use harvest and demographic data already in hand to better understand

population trends, numbers, dynamics and ecology. One day will be devoted to hands-on work with both traditional and newer modeling techniques for reconstructing populations from age-at-harvest data. Another half-day session will provide participants with the opportunity to view, revise, and interpret geographic metadata on reproduction and survival for populations across eastern North America.

This project will entail pre-workshop preparation of maps and datasets, based on contributions of information from workshop participants during winter, 2008-2009.

Events

Events

In addition, the 20th EBBW will include the traditional session for brief updates from states and provinces, a session for a limited number of oral presentations, and a poster session. Several field trip options will be offered on Wednesday, April 29.

During fall and early winter, we will be contacting state and provincial agency biologists with instructions for submitting population status and harvest information prior to the workshop and for preparing oral updates for the workshop. We will also be contacting agency biologists, as well as all attendees of the 19th EBBW, with an invitation to contribute geographically-indexed data on reproductive parameters for the mapping project described above. If you would like to be included in this mailing but do not fall into one of the above categories, please contact one of the conference organizers above.

Submission of Abstracts

Anyone wishing to present a poster or oral presentation at the 20th EBBW should submit an abstract of 250-500 words to one of the conference organizers above by February 1, 2009. Please indicate your preference for poster or oral presentation. The number of slots for oral presentations will be very limited, with priority given to significant findings from completed research, new techniques for research or management, and/or findings of broad geographic significance.

Travel

Grand Rapids, MN, is located in north-central Minnesota, about 180 miles north of Minneapolis/St Paul and 80 miles northwest of Duluth. Duluth and Hibbing, 35 miles northeast of Grand Rapids, have airports with a number of flights daily to Minneapolis or Detroit for connections across the country. We hope to arrange bus shuttles to meet several Duluth and Hibbing flight arrivals on April 26.

Registration

Information and instructions for registering and reserving lodging for the 20th EBBW can be found on the IBA website, www.bearbiology.com, under "Conferences".

10th Western Black Bear Workshop

American Black Bears and Brown Bears

Call For Papers

Go to www.bearbiology.com for workshop information!

For more information, contact the Workshop Coordinators:

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The 10th Western Black Bear Workshop (WBBW) is being hosted by the Nevada Department of Wildlife and will take place May 18-21, 2009, in Reno, Nevada, U.S.A., at the beautiful Peppermill Hotel & Resort.

It is the intent of the 10th WBBW committee to create an atmosphere that encourages communication among managers and researchers, and leaves attendees with an enhanced knowledge of black and brown bear issues facing Western North America. An agenda will be developed later in 2008, but we intend to have morning sessions on various topics, including new management techniques, human dimensions and population ecology in an oral presentation type format followed by facilitated workshops in the afternoon. There will be a poster session one evening.

Registration

On-line registration for the WBBW will open around mid-November at www.bearbiology.com. There will be a special raffle for all early registrants. Anyone registering for the workshop by April 1st will have their name entered into a special raffle for a great prize. On-site registration will be available throughout the workshop.

Workshop Highlights

We will begin the workshop in style with the Ice Breaker / Silent Auction on Monday evening May 18th, hosted by The Nevada Wildlife Record Book, www.nevadarecordbook.com. Entertainment will be provided by The Ghost of Mark Twain, a humorous and informative presentation on one of the areas special attractions, Virginia City. Hors d'oeuvres and no-host cocktails will be available and many special items may be bid on during the silent auction.

On Tuesday evening, we will enjoy a presentation by our featured speaker, David Garshelis. Wednesday evening will start out with a vendor's mixer among the poster presentations. It will conclude with a public presentation about bears.

The workshop will culminate on Thursday evening with a catered dinner on the shores of Lake Tahoe, hosted by Nevada Bighorns Unlimited, www.nevadabighorns.org.

The days will be filled with informative and useful topics for the plenary sessions and poster presentations, along with enlightening workshop discussions.

Accommodations and Travel

Current information is now posted on the IBA website, www.bearbiology.com, under "Conferences".

Call for Papers

Go to www.bearbiology.com for details. Papers will be accepted on both black and brown bears.

IBA Membership Application

Please Complete Both Sides of Form. Mail or Fax to Address Below.

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- Standard Membership US\$50.00/year, US\$45.00/year for three or more years.
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IBA Member Application, page 2

Please Complete Information on Both Sides of this Form!

Please check columns in which you have expertise and/or are willing to assist / advise IBA

		1. Expertise	2. Advise/Assist IBA			1. Expertise	2. Advise/Assist IBA
Accounting				Legal			
American Black Bear **	years			Legislative Process			
Asiatic Black Bear **	years			Life History			
Andean Bear **	years			Management			
Awards *				Member Concerns *			
Bear-Human Conflict				Media Relations			
Bears in Culture				Mentoring / Training *			
Behavior				Newsletter *			
Bylaws *				Nominations *			
Brown Bear **	years			Nuisance / Damage Management			
Conferences *				Nutrition			
Conservation *				Organizational Development			
Disease				Pathology			
Economic Development *				Physiology			
Education / Outreach *				Polar Bear **	years		
Enforcement				Policy *			
Ethics *				Population Dynamics			
Evolution				Quantitative Analysis			
Field Research				Sloth Bear **	years		
Financial Management				Strategic Planning *			
Food Habits				Sun Bear **	years		
Genetics				Toxicology			
Giant Panda **	years			Travel Grants *			
GIS				<i>Ursus</i> Journal *			
Grant Review *				Veterinary			
IBA History / Archive				Website *			
Habitat Evaluation				Wildlife Rehabilitation			
Husbandry / Zoo				Other - Specify			

** Please indicate number of years of experience with each species

* Indicates an IBA committee

Please check all academic degrees earned: BA/BS MA/MS PhD/DVM Other (list) _____

Please list major field of study _____

Please list all countries in which you have worked with bears _____

Please list languages in which you are fluent _____

What changes/improvements would you like to see in the IBA (newsletter, *Ursus*, conferences, etc.)? _____

How can IBA better serve its membership and/or help you? _____

Check here to include your name in the IBA membership directory

Thank you for completing the survey. Please tear out and mail or fax!

IBA Publications Order Form

<u>Ursus Journal & IBA Conference Proceedings *</u>			<u>Cost</u> (US\$)	<u>Quantity</u>	<u>Total</u>
4th	1980	Montana 1977	\$30.00	_____	_____
5th	1983	Wisconsin 1980	\$30.00	_____	_____
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7th	1987	Virginia/Yugoslavia 1986	\$35.00	_____	_____
8th	1990	British Columbia 1989	\$40.00	_____	_____
9th (1)	1994	Montana 1992	\$45.00	_____	_____
9th (2)	1997	France 1992	\$25.00	_____	_____
10th	1998	Ursus-Alaska/Sweden 1995	\$40.00	_____	_____
11th	1999	Ursus 11	\$45.00	_____	_____
12th	2001	Ursus 12	\$45.00	_____	_____
13th	2002	Ursus 13	\$45.00	_____	_____
14th	2003	Ursus 14 Volumes 1 & 2	\$45.00	_____	_____
15th	2004	Ursus 15 Volumes 1 & 2	\$45.00	_____	_____
16th	2005	Ursus 16	\$45.00	_____	_____
17th	2006	Ursus 17	\$45.00	_____	_____
18th	2007	Ursus 18	\$45.00	_____	_____
19th	2008	Ursus 19 (included with membership)	\$45.00	_____	_____
* 40% discount for 3 or more volumes, except Ursus 16 through 19				Less 40% discount	(-\$ _____)

Eastern Black Bear Workshop Proceedings, USA

10th	1991	Arkansas 1990	\$15.00	_____	_____
11th	1992	New Hampshire 1992	\$15.00	_____	_____
13th	1996	Vermont 1996	\$15.00	_____	_____
14th	1997	Mississippi 1997	\$15.00	_____	_____
15th	2002	Massachusetts 1999	\$15.00	_____	_____
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17th	2005	New Jersey 2003	\$15.00	_____	_____
18th	2008	Florida 2005	\$15.00	_____	_____

Western Black Bear Workshop Proceedings, USA

4th	1993	California 1991	\$15.00	_____	_____
5th	1995	Utah 1995	\$15.00	_____	_____
6th	2003	Washington 1997	\$15.00	_____	_____
7th	2001	Oregon 2000	\$15.00	_____	_____
8th	2005	Montana 2003	\$15.00	_____	_____
9th	2008	New Mexico 2006	\$15.00	_____	_____

Monographs of the IBA

<i>A Proposed Delineation of Critical Grizzly Bear Habitat in the Yellowstone Region</i>					
	by F. Craighead	(#1, 1977)	\$10.00	_____	_____
<i>The Status and Conservation of the Bears of the World</i>					
	by C. Servheen	(#2, 1989)	\$10.00	_____	_____
<i>Density-Dependent Population Regulation of Black, Brown and Polar Bears</i>					
	edited by M. Taylor	(#3, 1994)	\$10.00	_____	_____
<i>Population Viability for Grizzly Bears: A Critical Review</i>					
	by M. Boyce, B. Blanchard, R. Knight, C. Servheen	(#4, 2001)	\$10.00	_____	_____

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Form also available at www.bearbiology.com.

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⑧ term expires 2008

⑩ term expires 2010



About the International Association for Bear Research and Management (IBA)

The International Association for Bear Research and Management (IBA) is a non-profit tax-exempt organization open to professional biologists, wildlife managers, and others dedicated to the conservation of all bear species. The organization has over 550 members from over 50 countries. It supports the scientific management of bears through research and distribution of information. The IBA sponsors international conferences on all aspects of bear biology, ecology, and management. The proceedings are published as peer-reviewed scientific papers in the journal *Ursus*.

IBA Mission Statement

Goal: The goal of the International Association for Bear Research and Management (IBA) is to promote the conservation and restoration of the world's bears through science-based research, management, and education.

Objectives: In support of this goal, IBA's objectives are to:

1. Promote and foster well-designed research of the highest professional standards.
2. Develop and promote sound stewardship of the world's bears through scientifically based population and habitat management.
3. Publish and distribute, through its conferences and publications, peer-reviewed scientific and technical information of high quality addressing broad issues of ecology, conservation, and management.
4. Encourage communication and collaboration across scientific disciplines and among bear researchers and managers through conferences, workshops, and newsletters.
5. Increase public awareness and understanding of bear ecology, conservation, and management by encouraging the translation of technical information into popular literature and other media, as well as through other educational forums.
6. Encourage the professional growth and development of our members.
7. Provide professional counsel and advice on issues of natural resource policy related to bear management and conservation.
8. Maintain the highest standards of professional ethics and scientific integrity.
9. Encourage full international participation in the IBA through the siting of conferences, active recruitment of international members and officers, and through financial support for international research, travel to meetings, memberships, and journal subscriptions.
10. Through its integrated relationship with the Bear Specialist Group of the World Conservation Union (IUCN)/Species Survival Commission, identify priorities in bear research and management and recruit project proposals to the IBA Grants Program that address these priorities.
11. Build an endowment and a future funding base to provide ongoing support for IBA core functions and for the IBA Grants Program.
12. Support innovative solutions to bear conservation dilemmas that involve local communities as well as national or regional governments and, to the extent possible, address their needs without compromising bear conservation, recognizing that conservation is most successful where human communities are stable and can see the benefits of conservation efforts.
13. Form partnerships with other institutions to achieve conservation goals, where partnerships could provide additional funding, knowledge of geographical areas, or expertise in scientific or non-scientific sectors.



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Deadline for the February 2009 issue is January 5, 2009
printed with soy-based ink on 100% recycled, post-consumer waste paper