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Cover Photo: Syrian brown bear killed, purportedly in self-defence, by hunters in the Kurdistan region of northern Iraq, 2010. Photograph obtained from local people by Nature Iraq.

*International Bear News*, ISSN #1064-1564, quarterly newsletter of the International Association for Bear Research and Management (IBA)

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Back issues are available at [www.bearbiology.com](http://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](mailto: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 May 2011 issue is 5 April 2011.

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#### Membership

Use the form on pages 34-35 or go to [www.bearbiology.com](http://www.bearbiology.com) to order or renew memberships, make donations, and/or update member information.

## From the President

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It's early January when I write this and I hope you are off to a wonderful new year. While on vacation in the Netherlands in November, I was moved by the Tiger Conservation Summit held in Russia, which received much media attention. It was an impressive meeting of the leaders of 13 countries to work together on tiger conservation and one can only be encouraged by such high-level collaboration. But it also signified how dire the situation has become for tigers worldwide, with just over 3,000 remaining in the wild. Naturally, my next thoughts jumped to bears and whether we may be dealing with similar situations for bears in the future. I don't know the answer to that question any more than you do. What I do know is that the science-based efforts of organizations such as IBA and the Bear Specialist Group are essential for future conservation successes. A lot of work goes into this. IBA's Bear Conservation Fund is our primary avenue to support research, management, and education projects where they are needed most. We have been incredibly fortunate to have Karen Noyce as a most dedicated Chairperson for the Bear Conservation Fund. Next, a review committee chaired by Fred Dean spends countless hours reviewing proposals submitted through our Research and Conservation Grants Program. Members of the Bear Specialist Group provide species expertise for each range country and help rank the primary bear conservation concerns for various portions of the world.

You can find details of the 2010 grants program in the annual report of The Bear Conservation Fund (<http://www.bearbiology.com/iba/bcf.html>), which provides an overview of the grants program and highlights a number of projects (reports from previous years are also available). Even with relatively small grants, the accomplishments achieved by these projects are more than remarkable, providing crucial information to enhance our knowledge of bear populations and improve management. We have a great grants program in place. However, given the challenges we are facing, stepping up the funding level for the Bear Conservation Fund will be necessary. Together, I hope we can make that happen over the coming years. We always appreciate your private donations (they make up of The Bear Conservation Fund) but we also want to hear *your* ideas and suggestions for attracting larger donations.

## Membership Dues

Council passed a motion to establish a separate student membership for US\$45/year and raise the dues of a regular membership to US\$60/year. This change was based on placing more emphasis on students in IBA; the slight raise in regular dues partially offsets the lower student dues and partially addresses our need to cover increasing operating costs. Discounts for multi-year memberships will still be available and the low-cost membership and institutional memberships will remain the same. See our website for complete membership information.

## Election Results

I'm pleased to announce the results of IBA's recent election. Harry Reynolds was elected as Vice-President (Americas), Diana Doan-Crider was re-elected as Secretary, Cecily Costello was re-elected as Treasurer, and Mike Proctor, Siew Te Wong, Marty Obbard, and Sanbandam Sathyakumar were elected for Council Member. The latter three members are new to Council, are well known for their research accomplishments, and have tremendous international experience with bear conservation. I'm honored to welcome them to Council. Incidentally, I was re-elected as well so you will have to endure my President columns for another three years!

We had an excellent slate of candidates and I thank them for their willingness to be nominated, which takes a real commitment. I also thank the four Council members whose current terms have expired and who have made tremendous contributions over the years: Karen Noyce, Koji Yamazaki, Shyamala Ratnayake, and Jon Swenson. I know they will remain involved with IBA: we will have to rely on Karen as she has been our collective 'memory' on council and she will remain Chair of the Bear Conservation Fund; Shyamala will remain on the IBA grants review committee; and I'm sure I can 'trick' Koji and Jon into future committee work!

# Council News

The new Council is ready to tackle many new issues. Keep in mind this is your council so please do not hesitate to contact any Council member for questions, comments, or suggestions.

## **New IBA Award goes to Erich Follmann (posthumous)**

Council established a new IBA award, the Distinguished Service Award. The intention of this award is to acknowledge individuals who have made outstanding and lasting contributions to IBA's mission to promote science-based conservation of the world's 8 bear species. We already have a President's Award but we felt that occasionally there is a need to recognize exemplary contributions, recent or old, that have helped advance our mission. Council recognized that Erich Follmann was one such special person and decided to present this first award posthumously. Erich was the first chair of IBA's Research and Conservation Grants Program committee and built the foundation for what is now a cornerstone of IBA's mission. Please see the dedication to Erich elsewhere in this issue for his many other contributions.

## **Newsletter Changes and a 'Thank You' to Jim Tomlin**

You have noticed this is another electronic newsletter. Responses we received on the two non-print issues last year were favorable so Council voted to go electronic with all issues starting in 2011. The format of the newsletter will remain similar for now (PDF file) but in the coming months and years we may gradually change to a format that is more conducive to electronic publishing. *[Editor's note: We have made slight changes to this issue's format, specifically the use of one column instead of three, so the IBN is easier to read on a computer screen.]*

As I've mentioned before, the Editorial Team of *International Bear News* is an all-volunteer team. They do excellent work and put a lot of effort into each issue. Now that we are changing from print to electronic format, I do want to recognize and thank one person in particular: Jim Tomlin will not need to take care of printing and mailing as he has done for so long. Jim was always very diligent in getting the newsletter to the printer, labeling each one, and mailing them. Moreover, he found ways to cut the cost of printing and save on postage, which is critical for any non-profit organization. I wish Jim best of luck with future endeavors and hope that we can recruit his volunteer spirit elsewhere in IBA!

## **20th IBA Conference 2011 – Ottawa, Canada**

It will be July before you know it so start planning for the IBA conference in Ottawa. The conference organizers received 197 abstracts: 136 for oral presentations, 54 for posters, and 7 had no preference. The paper selection subcommittee has already reviewed all abstracts and made its recommendations to the program committee. Those who were successful in obtaining oral presentation slots should have heard by now. The paper selection subcommittee strove to achieve a high quality, balanced program covering a number of session themes. Based on what I've seen so far, the program for the Ottawa conference will be a very exciting one that highlights the conservation of all bear species.

The conference website received a total of 2,554 visits by the abstract submission deadline of 30 November 2010 from 77 different countries. Given the interest in this conference, please book your hotel room early. Two members of the conference planning committee (M. Obbard and T. Middel) attended another conference at the IBA 2011 host hotel, The Westin Ottawa, in December last year and they are confident that attendees will be very pleased with the choice of host hotel for the IBA conference in July.

Final information on conference registration costs, hotel reservations, and field trips will be available shortly so please keep checking the conference website: <http://www.wildliferesearch.ca/iba2011/>. 📧

## **In Memory: Erich Follmann**

Harry Reynolds and Nathan Pamperin

Erich Follmann, a dedicated and enthusiastic IBA member for over 25 years, passed away in Alaska on 26 July 2010. Erich's passion was to explore and investigate many aspects of carnivore biology and to encourage students in their quests to learn more about bears, not only in Alaska, but throughout the world. Erich was a professor in the Department of Biology and Wildlife at the University of Alaska Fairbanks.

He had a strong sense of integrity and commitment to wildlife, and deeply cared for the well-being of students. He was a tireless advocate and mentor to both undergraduate and graduate students and served on 20 doctoral and masters committees. He gave freely of his time for any individual with a question, a problem, or even a good joke. He went beyond giving the usual academic advice to students by sometimes helping provide his personal financial support for students to attend professional meetings that would further their education.

Erich served as the first chair of the IBA Research and Conservation Grants Program committee, set up its initial rating system to allocate funding based on scientific merit, as well as on where it would go the furthest and do the most good for bear conservation on a global scale. He served on the organizing committee for the 10th IBA conference that was held in Fairbanks, Alaska. He was instrumental in forging the close relationship that IBA had with the University of Alaska Fairbanks to make the conference a success, both in bringing participants to Alaska and in helping to attract its funding, from which about US\$25,000 came to the IBA treasury to support its programs and publications.

Erich applied practical solutions to difficult problems. He was the first to develop adaptations of telemetry to record subcutaneous temperature and heart rate of free-ranging grizzly bears and helped use this technology to assess potential impacts of seismic surveys for oil reserves on disturbance of denning grizzlies.

As many of Erich's students left academia, they joined the ranks of those who treasured him as a good friend. As one former student put it, "It's difficult to get across in words how much Erich did for his students and the respect he gained by doing so." Erich would have liked to be remembered as a person of integrity – easy-going, open, honest and welcoming. Many in IBA will miss him. Science-based bear conservation has lost a good friend and strong advocate. 🐻

## Bear Specialist Group

### What's So Special about the Syrian Bear?

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Syrian bears are the bears of Scripture. In the Bible, King David recalls that as a boy, he protected his father's flock of sheep from marauding bears. Various written accounts and artifacts indicate that Syrian bears once ranged throughout the Middle East, as far south as the Sinai Peninsula. The range shrank as bears were killed as pests and threats to human safety, and their habitat was reduced through cutting of trees and subsequent desertification. Syrian bears were also often taken to Europe for zoos or street shows because of their attractive golden coat.

Today, the recognized subspecies *Ursus arctos syriacus* still ranges from Turkey to Iran, including the Caucasus Mountains of Russia, Georgia, Armenia and Azerbaijan. But this bear is generally believed to have been extirpated in its namesake country of Syria (as well as neighboring Lebanon). Notably, the absence of this bear in Syria often gives rise to the misconception that the Syrian bear is extinct in the wild.

It is always difficult to know, though, whether bears might still exist in very small numbers in some remote pocket. A notable example is neighboring Iraq. The BSG was unaware of bears in Iraq until 2006, when a US military pilot observed what

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Photo obtained from local people by Nature Iraq

Syrian brown bears killed, purportedly in self-defence, by hunters in the Kurdistan region of northern Iraq, 2010.

he believed to be a wild (Syrian) bear through an infrared sensor. He did a Google search for bear experts in the Middle East, found the BSG, and reported his sighting, which was published in *International Bear News* (May 2006). Bears are also occasionally seen in animal markets in Baghdad, suggesting a source in Iraq. Recently, we learned from Anna Bachmann, Korsh Ararat, and Hana Ahmad, of the NGO *Nature Iraq* (<http://www.natureiraq.org>) that brown bears definitely still exist in parts of the Kurdistan region of northern Iraq — during interviews conducted in 2010, local people in 10 of 30 sites reported the presence of bears. Also, local hunters occasionally kill bears, purportedly in self-defence (which is not prohibited under Iraqi law) but also for meat, sport, and as a demonstration of their machismo. These kills are now often documented photographically on cell phone cameras and thus spread widely.

In Syria, however, there seems to be general agreement that bears have been absent for about the past 50 years. Even as long ago as the 1880's, bears were reported as rare in Syria, living only around Mount Hermon and some remaining wooded areas in or near Lebanon. Reports exist of two brown bears that were killed in southwestern Syria, near the Lebanese border, in 1911 and 1913. Anecdotal information indicated that small numbers of bears may have persisted in Syria for a few more decades. A report published by Dr. Lee Talbot (who was later Deputy General of the IUCN) indicated continued sightings of brown bears as well as bear skins and cubs for sale in markets in Syria as late as 1955. But this seems to be the last hard evidence of bears in this country. They are listed as extirpated in this country on the IUCN redlist.

It thus came as quite a surprise to be sent a link about brown bears being chosen as Syria's "Animal of the Year for 2010" (<http://www.english.globalarabnetwork.com/201010127622/Related-news-from-Syria/syrian-brown-bear-chosen-animal-of-2010.html>). The article highlighting the choice of Syrian bears referred to "seeing its traces in 2004 in the Bloudan area,

near Damascus.” This sparked our interest. After a few emails, we found the person – Mr. Issam Hajjar – who actually saw and photographed the tracks, which we confirmed to be those of a bear. Issam has written the accompanying article, which describes this discovery.

It is important to note that this discovery occurred six years ago. Slowly the word is getting out, and hopefully more can be done to recognize the importance of this discovery and spur more efforts to protect the remaining bears. It appears that local people are not aware of these bears, which, ironically, probably accounts for their persistence. The challenge will be in generating awareness to aid in their protection, while not attracting poachers to the area.

Presently, less than one percent of the land area in Syria is protected and Syrians are prohibited from entering most nature reserves. Moreover, few wildlife surveys have been conducted. Consequently, Syrians are typically not aware of the wildlife inhabiting their country. This makes it difficult to stimulate conservation-related activities.

We are of the belief that rediscovering a charismatic animal like the brown bear – indeed, not any brown bear but the brown bear of Antiquity – might be just what is needed to generate more enthusiasm for conservation. 🐻

## The Syrian Bear Still Lives in Syria

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I am a 37-year-old researcher and photographer, working at IFPO, the French Institute for Middle East in Damascus, Syria. My research focuses on the historical and geographical heritage of Syria. I have been working in the natural regions around Damascus for about 20 years, and in so doing I have discovered many rare features (monuments, caves, old trees, etc), mostly in remote places, like Mount Hermon, Anti Lebanon and Qalamoun mountain ranges, as well as in the desert. I have accumulated a large photo archive (>100,000 photos) documenting the geographical and historical heritage of Damascus and surrounding area, and have published research articles and books about the area. Presently I am directing a project called “Sannir”, which will document the many extraordinary natural and historical sites of Syria. I have a great interest in the natural world. A few years ago I made a discovery about bears, which later struck me as being of some importance. First let me provide a bit of background about the area.

### Geographical Background

*Sannir* is the old name of the largest and the highest mountain range in Syria. This range includes Mount Hermon, Anti Lebanon and Qalamoun. The word “Sannir” is originally Aramaic, meaning the mountain of light. It was so named for the heavy snow accumulation and the white color of its rocks and soil. The Old Testament refers to *Sannir* as “*Shannir*,” as when Solomen addressed his love saying: “*Look from the peaks of Shannir and Hermon, from the land of the lions and the mountains of the tigers ....*”

Sannir range is located in the southwestern part of Syria, running parallel to the Western Lebanon Mountains. It rises from the Hoola plain west of Golan to its peak at Qasr Antar (2814 m above sea level). Sannir spans an area about 170 km long and varies in width from 150 km in the north to 40 km in the south.

This area is the source of large water deposits. Without these, Damascus, the oldest of the world’s capitals, would have never been built. Much of the winter precipitation in the higher elevations of this range falls as snow.

### Historical Background

Many old references mentioned that the Sannir mountains were famous for the Syrian bear. *Becker’s Directory* (printed in 1882) mentions that the bear still existed in Mount Hermon, and Europeans and Americans used to come to Lebanon, hiking from Hasbaya village to Hermon heights to hunt these bears. A famous Syrian hunter named Nadra Mshaqa shot a

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© Issam Hajjar

Bear tracks were found near the Syrian town of Bloudan, shown here, in the Anti Lebanon range. Local people appeared to be unaware of any bears in the area.

bear in the Anti Lebanon heights in 1902. On present-day topographic maps of Anti Lebanon heights, there remain many places and geographical features containing the word "bear" (e.g., Bear hill, Bear cave, Bear valley).

Many villages are located in the heights of Anti Lebanon mountains, so local people (especially old people) still recall stories about incidents with bears near their villages. The most recent story that I heard concerned a sighting of a bear in 1960. Local people think that the Syrian bear disappeared shortly after that. The same is true on the Lebanon side, although one person told me that he thinks bears might still exist in the Lebanon mountain range because this area contains explosive mines that were left from the civil war, so people do not go there.

## **Re-discovering the Syrian Bear**

On January 15, 2004, I was hiking with my friend through the Anti Lebanon mountain range. It was foggy and snow blanketed the plain where we hiked and the surrounding high peaks. The area is 1900 m above sea level, with the highest nearby peak at 2466 m. The plain is full of apple trees, but local people usually do not go to these orchards in the winter, so in this season it has the feeling of being very remote.

We suddenly came upon a set of unusual footprints on the snow. We commonly saw tracks of wolves, rabbits, and some birds, but these were like nothing I had seen before. Initially I thought it might be a person without shoes (but that would

*continued on page 11*



Apple orchard near where bear tracks were found (same site, winter and summer)

© Issam Hajjar



© Issam Hajjar

Tracks of a brown bear observed in the winter of 2004 in the Anti Lebanon Range – the first evidence of bears in Syria in more than 40 years. The front foot tracks are visible inside the hind foot tracks



© Issam Hajjar

Habitat in vicinity of where bear tracks were found

be very odd, especially in the snow). I took some photos and went on, but did not follow the tracks because I had not yet realized what I had found.

Later, looking back at my photos, I came to realize that I had come across the tracks of a bear. I speculated that (s)he may have been using one of the many caves in this remote region, and had come out to look for a winter snack of apples. I wish that I had recognized the importance of what I had found at the time, and followed the tracks more closely, but it is gratifying to think that at least a few bears manage to live in this area, beyond the knowledge of the local people.

I subsequently showed my photos to some environmental groups in Damascus, hoping that they could help promote more efforts toward conserving biodiversity in the region. However, I found little interest, until Darem Tabbaa, an expert on Syrian fauna and president of the Syrian chapter of the Society for the Protection of Animals Abroad (SPANNA) became aware of them. Dr. Tabbaa had been interested in reestablishing bears in Syria through captive release, so was thrilled to learn that wild bears already existed here. Dr. Tabbaa was instrumental in making others aware of this finding.

Slowly, it seems, the situation for wild fauna in Syria is getting better. Stricter hunting laws have been in effect since 1994. Obviously much more conservation work is needed. I am hopeful that the rediscovery of Syrian bears will prompt a renewed appreciation for the magnificent wildlife that still lies hidden, but in a precarious state, in this country. 🐻

# Bear Specialist Group

## Cultural and Religious Beliefs Pose Challenges for Bear Conservation in Nepal

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Nepal is a small country (147,181 km<sup>2</sup>) that encompasses enormous elevational variation (60–8848 m). This extreme elevational variation provides habitat for three species of bears: sloth bears inhabit the southern lowlands (Terai; <1500 m), Asiatic black bears live in the Middle Hills region up to treeline (1500–3500 m), and Tibetan brown bears are sparsely distributed above treeline.

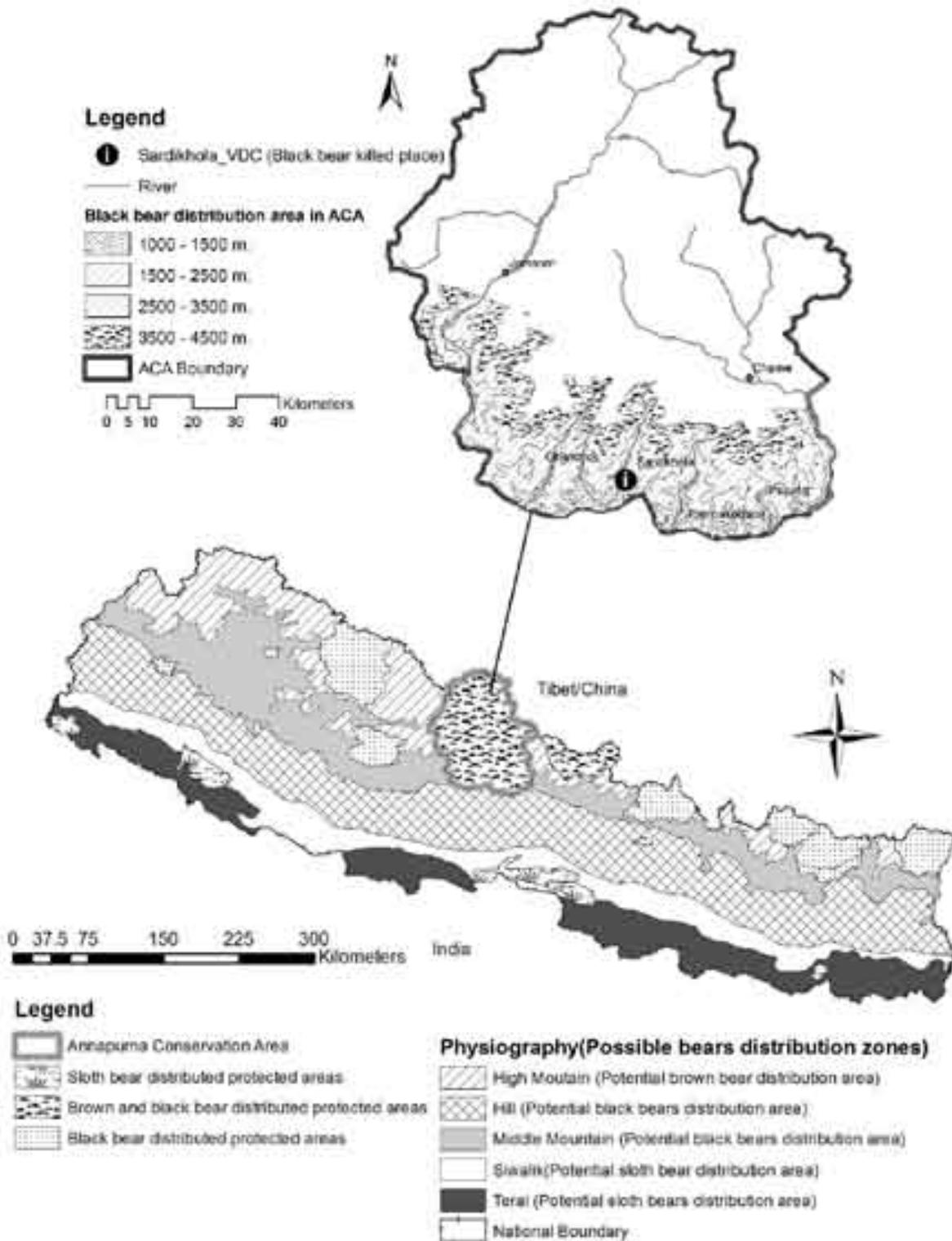
Nepal is also a multicultural/religious country, with different ethnic and cast systems. The different religions follow different values and norms. About 80% of the population is Hindu followed by Buddhist (11%), Muslim (3%) and Christian (<1%). Buddhists believe that animals are a gift from God, so they are forbidden from killing them. However, this religious perspective has not always been sufficient to conserve biodiversity. Christianity has often promoted overexploitation of natural resources, while the Hindu recognition of the Ganges as sacred river has not prevented its pollution.



Poachers (left and right) and person who bought the head (middle) of an Asiatic black bear taken inside Nepal's Annapurna Conservation Area. All three were eventually caught and face legal action.

The high illegal market value of wildlife and poor livelihood of rural people in Nepal, combined with the persistence of some archaic cultural beliefs, induce the killing of wildlife for subsistence and for sale to national and international traders and poachers. Bears are highly prized for their parts, especially gall bladder, meat, fat, skin and bones. Bear bile is boiled in water and the soup is taken orally to cure gastritis, other stomach problems, and even tuberculosis. A few drops of bear bile mixed in about 200 ml of cow's milk is given to cure asthma. Bear fat is massaged onto the body to reduce muscular pain. Charms are made out of bear bones and worn to drive off evil spirits. Such traditional and cultural beliefs hamper efforts to conserve bears in Nepal.

A case in point is a recent incident in which poachers killed a black bear within the Annapurna Conservation Area. In September 2010, two local poachers killed a black bear within the Sardikhola VDC (Village Development Committee) forest. They used wire snares to catch the bear. After finding the bear in the trap, they killed it with a gun and stones. They brought the dead



Approximate distribution of three species of bears in Nepal, within distinct elevational bands. Inset shows Annapurna Conservation Area. (Prepared by A. Aryal)

# Bear Specialist Group

bear to the village and divided its meat in 18 parts; 14 people from the village ate the meat, believing that it was especially good for their health and would restore energy to their body. The poachers sold the head of the bear to a person in another village for Rs 1000 (US\$15), who bought it to help his paralysis. That person believed that if he buried the head at the edge of a river and waited three months, his paralysis would be cured. So he bought the head and buried it at the edge of the Rardikhola River, with hopes that he would soon be free of his ailment. However, legal authorities learned of the situation, found the people involved, and apprehended them for legal action. The case is still unresolved, but demonstrates the pressures imposed on bears by continued beliefs in their special nutritional and medicinal value. This represents another, often-neglected issue that must be considered to effectively conserve bears. ■

## Sloth Bear Attacks: causes and consequences

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Throughout the Indian subcontinent, sloth bears are known for their potential to become aggressive toward humans (Higgins 1932, Norris 1969, Seshadri 1969, Laurie and Seidensticker 1977, Phillips 1984, Krishna Raju et al. 1987, Gopal 1991, Rajpurohit and Krausman 2000, Bargali et al 2005, Akhtar 2006, Ratnayeke et al. 2007a). They are secretive animals that appear to avoid human contact whenever possible and seem to have a low tolerance toward people when they do inadvertently meet (Garshelis et al. 1999). Unfortunately, they often encounter humans in agricultural fields or when people enter the forest to gather food or wood. The potential danger this bear poses to humans often makes it difficult to garner local support for conservation efforts (Bargali et al 2005, Akhtar 2006, Dharaiya and Ratnayeke 2009).

Sloth bear–human conflicts appear to be on the rise in many parts of India, and seem correlated with increased human encroachment and disturbance as well as habitat degradation (Bargali et al 2005, Akhtar 2006, Dharaiya and Ratnayeke 2009). The widespread nature of the attacks reflects the fact that sloth bears are still relatively widespread in India. The sloth bear has thus far been able to persevere in areas that have become either degraded or small isolated pockets of habitat. Most other large mammals have simply not been able to hang on in these areas. The reasons for the sloth bears perseverance in these areas are largely wrapped in its ecology, notably: 1) the sloth bear is a very secretive animal; 2) it is largely nocturnal; 3) it has a very small home range for a bear (Joshi et al 1995, Ratnayeke et al. 2007b); 4) it is largely myrmecophagous (ant and termite eater), and studies have suggested that myrmecophagous mammals are better able to deal with habitat fragmentation than other similar-sized mammals (Abensperg-Traun 1991); 5) it is found in many habitat types; and 6) it is socially tolerant of other sloth bears as long as food is plentiful (Laurie and Seidensticker 1977, Joshi et al. 1999). These factors are all beneficial to the bear's survival in increasingly fragmented habitats.

However, when faced with a fight or flight situation the sloth bear has also evolved an extremely violent aggressive tendency. This aggressive behavior most likely evolved due to sharing habitat with and encountering other large mammals, such as elephants and rhinoceroses, and predators, most notably tigers, leopards, and dholes (Garshelis et al. 1999). The same behavior is often directed toward humans, inevitably with bad outcomes for both the human and the bear. These encounters now form a different sort of threat to the sloth bear, which results from the attitudes and actions of the people who live in proximity. So the question remains whether the human element will tolerate this animal in increasingly close quarters.

Here we document a particularly severe attack that occurred near a tiger reserve in central India. The documentation of these events add to the growing body of knowledge of sloth bear attacks, with the hope that further understanding may lead to future mitigation efforts and more effective conservation.



In 2010, four people were killed by a sloth bear in a village near Melghat Tiger Reserve, central India.

# Bear Specialist Group

© Swapnil Sonone



Sites where two sloth bear attacks occurred.

On 4 August 2010, in a small village located in the multiple use area of the Melghat Tiger Reserve, a lone bear wandered into Jarida village and before the night was over four people were killed and another two injured. The bear was first spotted around the village that morning, between 0700–0800 and again around 1200. Each time it was sighted the villagers threw rocks at the bear.

At roughly 2030, Mr. Vairale, a daily wages labor worker for forest department, mistakenly thought the bear was a buffalo, as it was dark and there is no electricity in the village. When he approached, the bear growled and gave a minor charge. Mr. Vairale threw a blanket at the bear and ran to the nearest house. The bear did not chase the man but dispatched the blanket and ran in the opposite direction trying to get away. Mr. Wakode, a forest guard, and Mr. Tumre heard a scream and went to investigate. They flashed a light at the bear, and just as they did a dog approached and started barking at it. The bear, agitated by the light and the barking dog, chased after the dog. The guard pointed his torch at the bear at which point it turned toward the light and attacked Mr. Wakode, who died of severe injuries on the way to the hospital.

After that incident the bear tried to hide in a vacant house. By 2100, villagers had formed a mob with torches and were looking for the bear. Though details are not clear as to exactly what happened next, since nobody witnessed the whole incident, the bear became agitated by the mob and charged a group of villagers following behind the mob. Mr. Parte was killed on the spot. The mob continued to throw rocks and distract the bear. The bear, in a panic, turned and ran at another man, Mr. Jagdev, who was just outside his front door. The bear grabbed him by the hand, and although injured, Mr. Jagdev

was eventually able to get inside his house and close the door. The bear hid in the house next door for 10–15 minutes until the owner drove it away by shouting and throwing burning papers at it.

The bear then ran a short distance and hid in a lantana bush where it stayed until four teachers came walking over to see what the disturbance was about. Unknowingly, one of the teachers pointed his flashlight at the bear, which caused it to charge the men and attack Mr. Dhakate, who was on his cell phone. Mr. Dhakate was badly injured and eventually died. The bear was chased off by a man on a motorcycle by 2200.

Soon after a group of students approached, and hearing the shouts they all ran. One student, Satish Mowaskar, ran a different direction from the other students and the bear chased him down and fatally injured him. After this attack the bear found another building to hide in until about 0300 the next morning when it was chased from this building and eventually made its way out of the village and back to the forest.

This bear purportedly involved in these incidents was killed two days later (7 August). It was tracked and found 2 km from Jarida Village. It was positively identified by the markings on its chest and some singed fur. The necropsy of the dead bear found that it was an adult male, estimated to be 6 years old. The virology report states that the bear's brain was normal. By all accounts this was a normal, healthy adult male bear.

It is apparent that from the time the bear entered the village it had been harassed by the local villagers (i.e. throwing stones and other objects, and chasing the bear). As the incidents escalated the bear was caught in a continuing fight or flight situation. When its escape was continually cut off, it reacted by attacking violently, which is an important survival behavior in this species. In this case the bear probably felt its life was in danger. There is no evidence to suggest that the bear was rabid or otherwise sick. The continual harassment and chaos throughout the day may have put the animal on edge.

Is it possible that the limiting factor for some sloth bear populations, at least for some small, isolated populations, is retribution killings? There are reasons to believe this could be the case: 1) there are multiple documented incidents of retribution killings of sloth bears (Akhtar 2006, Dharaiya and Ratnayeke 2009); 2) it seems likely that only a very small fraction of sloth bears killed by humans, as retribution or otherwise, are documented; 3) sloth bear attacks on humans appear to be on the rise; and 4) it is difficult to gain momentum for sloth bear conservation in parts of India where bear attacks are relatively common (Akhtar 2006, Dharaiya and Ratnayeke 2009). Though villagers in parts of India still possess, at least the remnants of, a conservation ethic (Bargali et al. 2005), bear attacks (and the fear of attacks) may be severely testing this ethic.

## Literature Cited

- Abensperg-Traun, M. 1991. A study of home-range movements and shelter use in adult and juvenile echidnas, *Tachyglossus aculeatus* (Monotremata: Tachyglossidae) in Western Australian wheatbelt reserves. *Australian Mammalogy* 14:13–21.
- Akhtar, N. 2006. Human-sloth bear conflict: a threat to sloth bear conservation. *International Bear News* 15(4):15–17.
- Bargali, H. S., N. Akhtar, and N. P. S. Chauhan. 2005. Characteristics of sloth bear attacks and human casualties in North Bilaspur forest division, Chhattisgarh, India. *Ursus* 16:263–267.
- Dharaiya, N. and S. Ratnayeke. 2009. Escalating human-sloth bear conflicts in North Gujarat: a tough time to encourage support for bear conservation. *International Bear News* 18(3):12–14.
- Garshelis, D. L., A. R. Joshi, J. L. D. Smith, and C. G. Rice. 1999. Sloth bear conservation action plan. Pages 225–240 in C. Servheen, S. Herrero, and B. Peyton, compilers. *Bears: Status Survey and Conservation Action Plan*. IUCN/SSC Bear and Polar Bear Specialist Groups.
- Gopal, R. 1991. Ethological observations on the sloth bear (*Melursus ursinus*). *Indian Forester* 117:915–920.
- Higgins, J. C. 1932. The Malay bear. *Journal of the Bombay Natural History Society* 35:673–674.
- Joshi, A. R., D. L. Garshelis, and J. L. D. Smith. 1995. Home ranges of sloth bears in Nepal: Implications for conservation. *Journal of Wildlife Management* 59:204–213.

# Bear Specialist Group

- \_\_\_\_\_, J. L. D. Smith, and D. L. Garshelis. 1999. Sociobiology of the myrmecophagous sloth bear in Nepal. *Canadian Journal of Zoology* 77:1690–1704.
- Krishna Raju, K. S. R., A. V. R. G. Krishna Murthy, C. Subba Reddi, N. A. V. Prasad Reddy, R. Lokaranjan, and K. J. N. G. Shankar. 1987. Status of wildlife and habitat conservation in Andhra Pradesh. *Journal of the Bombay Natural History Society* 84:605–619.
- Laurie, A. and J. Seidensticker. 1977. Behavioural ecology of the sloth bear (*Melursus ursinus*). *Journal of Zoology (London)* 182:187–204.
- Norris, T. 1969. Ceylon sloth bear. *International Wildlife* 12: 300–303.
- Phillips, W. W. A. 1984. *Manual of the Mammals of Sri Lanka. Part III. Wildlife and Nature Protection Society of Sri Lanka.* 2nd ed.
- Rajpurohit, K. S. and P. R. Krausman. 2000. Human–sloth bear conflicts in Madhya Pradesh, India. *Wildlife Society Bulletin* 28:393–399.
- Ratnayeke, S., F. T. van Manen, R. Pieris, and V. S. J. Pragash. 2007a. Landscape characteristics of sloth bear range in Sri Lanka. *Ursus* 18:189–202.
- \_\_\_\_\_, \_\_\_\_\_, and U. K. G. K. Padmalal. 2007b. Home ranges and habitat use of sloth bears *Melursus ursinus inornatus* in Wasgomuwa National Park, Sri Lanka. *Wildlife Biology* 13:272–284.
- Seshadri, B. 1969. *The Twilight of India's Wildlife.* John Baker, London. 🐻

## Maoist Rebel Threats Cause the Evacuation of Captive Sloth Bears

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The Purulia Bear Rescue and Rehabilitation Center is one of the four sloth bear rescue and rehabilitation centers established by Wildlife SOS to help conserve the sloth bear and to eradicate the illegal dancing bear trade in India. This rescue center was established in collaboration with the West Bengal State Government and the West Bengal Forest Department. The center, situated in the Surulia Reserve Forest Area, provided shelter for 22 ex-dancing bears. However, in November, 2010, these bears had to be suddenly evacuated to protect them from a serious threat from Maoists.

The West Bengal Forest Department and the staff at the Purulia Center received threats by way of posters written in the vernacular language (Bengali) from the Maoist insurgency groups, instructing them to evacuate all staff from the forest area. Since it is not uncommon for these Maoist groups to burn down buildings and forests and also attack civilians and government representatives, this threat was considered to be a high-risk threat to the bears and the rehab center. With the Maoist groups posing a constant threat in the forest areas of West Bengal, Wildlife SOS ultimately decided to move the



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Sloth bears being transported from Wildlife SOS rescue center in West Bengal to center in Karnataka, India, as a result of Maoist threat.



Route of sloth bear evacuation from West Bengal to Bangalore, Karnataka.

22 bears out of the area. The Central Zoo Authority, Ministry of Environment and Forests recommended that this evacuation be done to ensure the safety of the bears and requested the West Bengal and Karnataka State Governments facilitate the emergency evacuation of these bears.

The origins of the Maoist group can be traced back to a 1967 peasant uprising in the remote village of Naxalbari in West Bengal. Although the initial uprising was quashed, the Maoists eventually expanded their base, enlisting thousands of villagers and landless tribal people who now form the movement's core. Maoists have emerged as the most potent threat to India's internal stability, and have been responsible for terrorist attacks across much of the eastern portion of the country.

The militant group, which claims to represent the rural poor and opposes seizures of tribal lands for new mining projects, now controls or has a powerful influence on one third of India's remote districts. The insurgency has reportedly spread to 20 of India's 29 states, with the main center of activity in the so-called "Red



© Wildlife SOS

Evacuated sloth bears arriving at Bannerghatta Bear Rescue Centre.

# Bear Specialist Group

Corridor,” which covers the natural resource–rich states of Jharkand, West Bengal, Orissa, Bihar, Chhattisgarh, and Andhra Pradesh. Tribal groups and residents in many rural areas have been left behind by India’s economic development, and poverty and discontent with local government corruption are seen as fueling support for the insurgents.

In December 2009, Maoists launched a brutal assault on a zoo in Jhargram town. Rebels fired indiscriminately into deer and black buck enclosures, setting fire to animal cages, burning hundreds of birds and beating the forest officers and forest guards. The zoo housed many threatened species, some of which were shot to death. A huge aquarium was smashed to bits and trees were set ablaze.

Because of this previous barbaric attack, the new threats were taken very seriously. The Principal Chief Conservator of Forests (Wildlife) and the Chief Wildlife Warden, the Member Secretary of the Zoo Authority of Karnataka and the executive director of Bannerghatta Biological Park agreed to the relocation of the 22 bears and facilitated their emergency evacuation and translocation to the Bannerghatta Bear Rescue Centre (BBRC) in Bangalore, Karnataka. The bears were evacuated in three large trucks aided by a team of 12 trained staff from Wildlife SOS. Trained bear keepers and an experienced veterinarian traveled with the bears from West Bengal to Bangalore.

The bears were checked by the veterinary officers at the BBRC upon arrival and found to be in good health. They have been kept in the quarantine area for observation and monitoring, and will be released in their designated enclosures after the necessary veterinary and health screening.

Maoist groups often use the forest areas as hideouts and operational hideaways. This creates a severe management issue for the forest department, as routine patrolling is unsafe. The rebels often exploit the rich forest resources. Poaching by members of these groups is not uncommon. Moreover, when a forest area is in the control of a rebel group, other poachers are likely to move in to take advantage of the lack of security – all in all, a very bad situation for wildlife conservation. 🐾

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Drs. Chuck Schwartz, John Seidensticker, and Michael Proctor are available to provide technical and scientific assistance to BSG members. Chuck has been involved in bear research for over 30 years in Alaska on American black bears and brown bears, and currently studies grizzly bears in the U.S. Yellowstone Ecosystem. John heads the Conservation Ecology Center in the Smithsonian Conservation Biology Institute at the National Zoo, serves as Chairman of the Save The Tiger Fund Council, is Affiliate Professor of



Mike Proctor, one of three BSG technical advisors, takes part in a study of Gobi bears in Mongolia.

# Bear Specialist Group

Environmental Science and Policy at George Mason University, and serves as Independent Advisor on the Global Tiger Initiative for The World Bank. Mike has been carrying out brown and black bear research for 15 years in British Columbia, Canada. His research efforts have focused on formulating and implementing conservation solutions for small threatened populations. All three of us have a keen interest in the conservation of bear species around the world, and, as such, we are willing to donate our time to assist BSG members whose research relates to bear conservation issues. We are available to assist with project development, study design, analysis questions, or help with writing a funding proposal. We are also willing to provide limited assistance with manuscript editing. We are available in an advisory capacity or can help connect BSG members with other researchers whose skills are best suited to a particular need. Please feel free to contact any of us by email with inquiries. 📧

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## Brown Bear Refugees Threatened by Ski Investments in the Western Carpathians (southern Poland)

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The Zywiecki Landscape Park (ZLP) is situated in the western-most part of the Carpathian Mountains, near the border between Poland and Slovakia (49°32'N, 19°13'E). The area, together with the protected zone of the park, covers approximately 578 km<sup>2</sup>. Existing vegetation was mainly shaped by human activity in the past. Foothills are heavily deforested, while middle elevations are covered by coniferous and mixed forests, with dominant species being the beech (*Fagus sylvatica*)



Figure 1. A brown bear photo made by trap-camera on the slopes of Romanka Mt. in the Zywiecki Landscape Park (S Poland)

and the spruce (*Picea abies*). Due to harsh climatic conditions above 1000 m a.s.l., the highest elevations are dominated almost exclusively by spruce. The human population density is on average 150 individuals/km<sup>2</sup>, which is much higher than the average human density in the entire country (124 indiv./km<sup>2</sup>). Because of its high conservation value, the area was also designated and subsequently approved by the European Commission as a "Natura 2000" protected area.

In Poland the brown bear (*Ursus arctos*) occurs exclusively in the Carpathians, and ZLP lies on the very western edge of its permanent range. In neighbouring mountain ranges (Silesian Beskid Mts. and Beskid Maly Mts.), which are situated further south and west, only single individuals appear from time to time (Jakubiec and Buchalczyk 1987, Jakubiec 2001). In ZLP, bears co-exist with other large carnivores – the wolf (*Canis lupus*) and the lynx (*Lynx lynx*) (Niedziałkowska et al. 2006, Nowak et al. 2008), as well as with several species of small and medium-sized carnivores. This area serves as a refuge for approximately 4-6 brown bears which freely roam between Polish and Slovakian parts of the mountains (Jakubiec 2001). The greatest bear activity is observed in higher elevations (e.g. slopes of Pilsko Mt. 1557 m a.s.l., Romanka Mt. 1366 m a.s.l., and Wielka Racza Mt. 1236 m a.s.l.), where their winter dens are also found.

The local communities mainly base their economic development on tourism and recreational activities. They have recently focused on the development of new ski centers with extensive networks of ski routes and ski-lifts. Due to topographical conditions, these investments are planned to occur precisely on mountain slopes that serve as the most important refuges for the local brown bears, as well as lynx and wolves. So far, the activities of local environmental NGOs have effectively prevented the start of construction of ski resorts in the vicinity of bear hideouts. Because of the location within a Natura 2000 site, all planned investments should pass proper environmental impact assessment procedures, which should also discourage additional potential investors. Nevertheless, the huge pressure of investors to develop new ski resorts or expand existing ones is still one of the most important threats to the local bear population.

The conflicts between investors and nature conservation are widely reported in media. Journalists often criticize any emphasis on the protection of natural values, which restrains, in their opinion, the local economy. Such media increases negative perceptions toward bears and other natural values among local residents. There is no single action that can solve the conflict, but certainly there is a significant need for the education of local inhabitants about brown bears and their potential role in ecotourism promotion. It is also necessary to show local communities new ways of development, which ensure their economic stability but also help to protect bears as the undeniable value of the region.

## Literature Cited

- Jakubiec Z. 2001. The brown bear *Ursus arctos* L. in the Polish part of the Carpathians. *Studia Naturae* 47:1-108. [in Polish with an English summary]
- Jakubiec Z. and T. Buchalczyk. 1987. The brown bear in Poland: its history and present numbers. *Acta Theriologica* 32:289-306.
- Nowak S., R. W. Mysłajek, and B. J. drzejewska. 2008. Density and demography of wolf *Canis lupus* population in the western-most part of the Polish Carpathian Mountains, 1996-2003. *Folia Zoologica* 57:392-402.
- Niedziałkowska M., W. J. drzejewski, R. W. Mysłajek, S. Nowak, B. J. drzejewska, and K. Schmidt. 2006. Habitat requirements of the Eurasian lynx in Poland – large scale census and GIS mapping. *Biological Conservation* 133:63-69. ■

## Men and Bears: Up and Close

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(translated by Tanya Rosen)

One of the hardest aspects of bear conservation is understanding interactions between bears and humans and improving attitudes towards bears. The nature of that interaction is influenced by emotions and attitudes often irrational towards bears and often filled with meanings of difficult comprehension.

Conscious of that, in carrying out conservation projects for the last many years in the Parco Adamello-Brenta in Trentino, we have tried to consider very carefully the way we communicate with the public about bears, in an attempt to stimulate their acceptance. In communicating with the public, too often, bears came across as cuddly teddy bears, far from the reality and way too far from the fears of people, especially those that see bears as a constant threat.

To the contrary, a well-crafted communication effort has to generate support for the species by highlighting both the positive and negative aspects of their presence. This is particularly important since there is a tendency to give an emphatic spin to the stories in which a bear is involved, to the point where the story loses its objectivity. A successful communication message also has to be able to cut across political borders and not be amenable to exploitation by groups that either fear bears and thus emphasize their danger to the public through myths and legends or groups that think bears ... are teddy bears. The bear is simply a wild bear with unique features that makes it a heritage of nature.

On these premises, the Wildlife Office of the Parco Naturale Adamello-Brenta in Trentino launched a survey called "Bear-Human encounters," in an attempt to collect information on bear-human encounters in Trentino. The survey was carried out between 2007 and 2010 in person and on the phone. One hundred and fifty-seven people that had an encounter with a bear in Trentino participated and 355 surveys were filled out (there was a survey filled out for each bear encounter). The goal of the survey was to gain a better understanding of bear ecology and behavior when encountering people, including factors that might influence the reactions of the bear. We also tried to assess whether a bear encounter can possibly modify people's attitudes towards the species, specifically whether the experience of encountering the bear makes people more or less accepting of bears. We also sought to collect information on the dynamics of the encounters. The key conclusions stemming from the survey are the following:

- There was only one instance where the bear reacted, but not in a threatening way and not even in a way to be considered a bluff charge. That happened in reaction to either being followed continuously or the sudden nature of the encounter;
- In 60% of the encounters the bear moved away;
- The encounter with a bear is able to modify a discrete number of attitudes (by making them more positive) of people that are involved in such encounter; and
- The relatively more negative attitudes are related to the reduced distance between man and bear in the encounter (less than 10 metres); the fear rather than the behavior of the bear itself might contribute to that. ■

## Louisiana Black Bear Project Update

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The Louisiana black bear (*Ursus americanus luteolus*) once occurred throughout Louisiana, in southern Mississippi, and in eastern Texas (Hall 1981). Today, habitat in the Mississippi alluvial plain is highly fragmented due to land clearing for agriculture. As a consequence, bears in the region exist in isolated fragments of wooded habitat in the Tensas River Basin

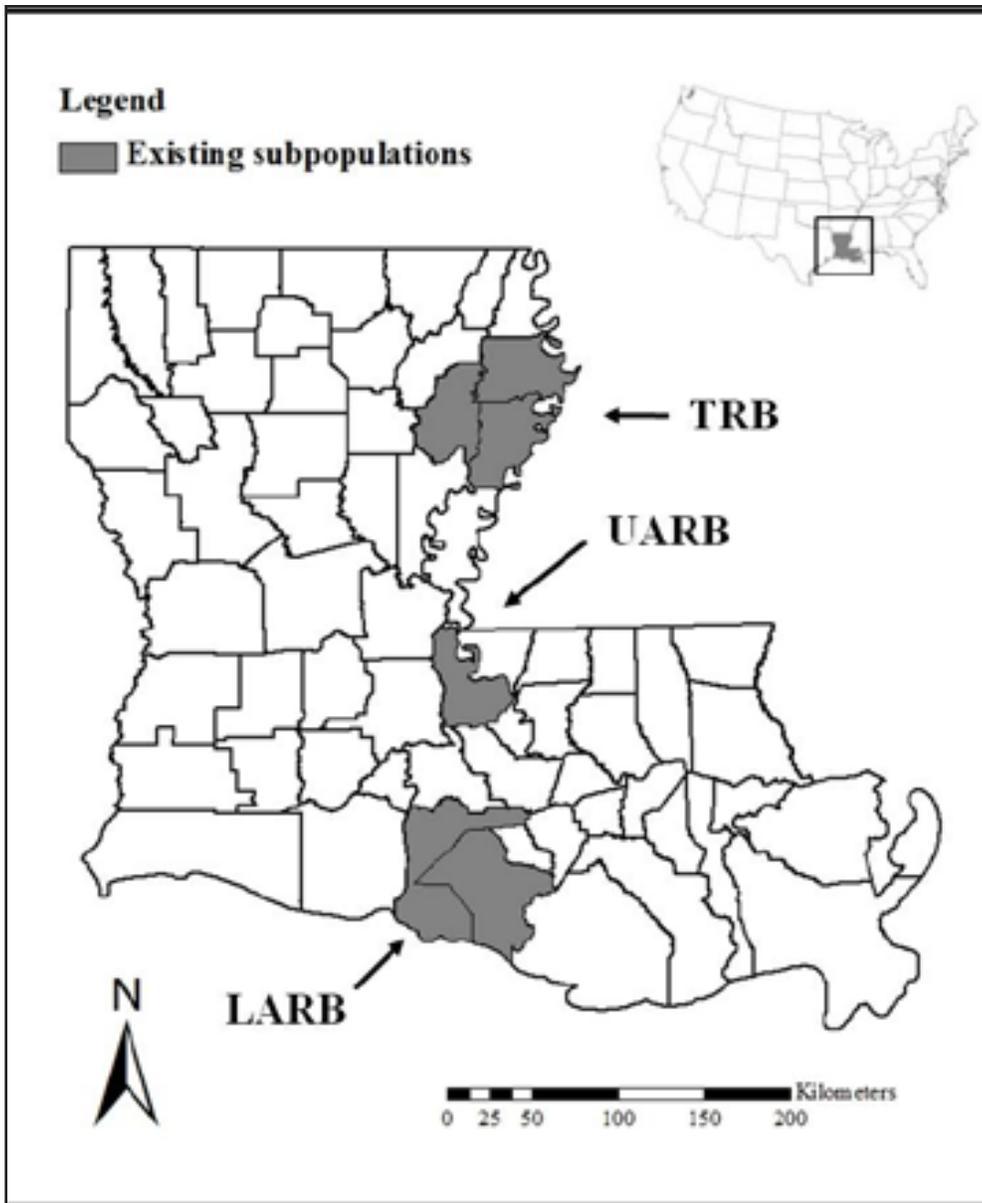


Figure 1. Distribution of Louisiana black bear subpopulations in Louisiana, USA.

(TRB), the Upper Atchafalaya River Basin (UARB), and the Lower Atchafalaya River Basin (LARB) along the Gulf Coast (Fig. 1). In 1992, the U.S. Fish and Wildlife Service granted the Louisiana black bear Threatened status under the U.S. Endangered Species Act, listing loss of habitat as a primary threat (U.S. Fish and Wildlife Service 1992). The 1995 Recovery Plan specified that at least two of the three subpopulations would have to be viable, immigration and emigration corridors between the two viable subpopulations would have to exist, and that the habitat and interconnecting corridors that support each of the two subpopulations would have to be protected for recovery to occur. Our objective was to develop an integrated research program to determine whether the recovery criteria set forth in the 1995 Louisiana Black Bear Recovery Plan have been met. Specifically, we intend to determine the viability of the three subpopulations and assess and identify potential corridor habitat to enable linkage between at least two of the three subpopulations.

Research on the three study areas is focused on using mark-recapture data within a robust design framework for each

subpopulation by collecting hair samples during eight 1-week periods over a number of years. Genotyped hair samples can be used to estimate abundance, density, apparent survival rates, growth rates, and annual process variance of each, which will then be used to conduct population viability analyses. Hair samples have been collected on TRB since 2006 and Mike Hooker recently completed a M.S. thesis whereby he used data collected through 2008 to estimate demographic parameters based on 675 captures of 202 individual bears. A robust design analysis involving individual covariates and mixture effects (to account for heterogeneous capture probabilities) was used to estimate apparent survival (0.91, 95% CI = 0.62–0.98), mean annual population size (294, SE = 31), and density (0.66 bears/km<sup>2</sup>, SE = 0.07). Hair sampling efforts on TRB will be continued through 2011 to refine parameter estimates and to better estimate temporal process variance, which is essential for population viability analysis. Abundance and density estimation for the UARB study area is nearing completion at this time. M.Sc. candidate Carrie Lowe is preparing her thesis, which will involve the analysis for the first three years of hair sample data. From 2007 to 2009, Lowe collected 2,977 hair samples, resulting in 425 captures of 70 individuals. Hair collection was extended on UARB to 2011 and M.S. candidate Kaitlin O'Connell began her field-work in 2010, collecting 3,451 hair samples. Also in 2010, the first year of hair sample collection for the LARB study area was completed by M.S.



Young male Louisiana black bear fitted with GPS radio collar, Tensas River Basin, Louisiana, USA.



Female Louisiana black bear and 3 cubs inside hair collection site, Tensas River Basin, Louisiana, USA.

candidate Jesse Troxler. Troxler constructed 119 collection sites on 37 properties and collected 672 samples over eight 1-week collection periods, which are being genotyped. Sampling on LARB will continue through 2012.

In addition to DNA-based analyses, we trapped and placed VHF radio collars on adult females since 2006 on TRB to estimate survival and reproductive rates. Those data will be used in an individual-based population projection model to estimate probability of persistence for that subpopulation, which will complement (or be used as ancillary data for) the mark-recapture population models. With the help of Louisiana Department of Wildlife and Fisheries biologists, we also deployed 16 GPS radio collars on a range of age and sex classes of bears captured on each of the three study areas to characterize corridors usage. We plan on using step selection functions or similar techniques to develop rule sets for habitat used by dispersing bears to identify probable movement pathways. Genetic data also will be used to evaluate the functionality of corridors. A meta-analysis of the mark-recapture data and the telemetry data will be the topic of a Ph.D. dissertation to be prepared by Jared Laufenberg in 2012. The focus of that analysis will be to determine if the recovery criteria have successfully been met. 🐾

# Captive Bears

## Karelian Bear Dogs for Bear Capture

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In 2008, in Whistler, British Columbia, our traps were set to catch black bears for weeks without success. For the three years prior, if we set a trap, we caught a bear. One of the Conservation Officers and I decided to try to use my Karelian Bear Dog, Sisko, to capture bears. We ended up catching at least six bears using the dog, so when I read an article about the Andean Bear Project in Ecuador wanting to try using dogs to capture bears, I wondered if Sisko and I could help.

I contacted the Andean Bear Project run by Armando Castellanos. The most difficult thing, we thought, would probably be the timid nature of Andean bears compared to human tolerant coastal BC black bears. We wouldn't likely be able to use the dog to find the bear, then dart it like we had a couple of times in BC. But if we were lucky enough to dart a bear, we could use the dog to track it. One of the technicians had gotten very close to an Andean bear in a maize field in April of 2009, so we thought it was worth a try.

I applied for funding with the IBA, got together the documents I needed to fly with a dog to Ecuador, and flew down for three weeks in April and May of 2010. Normally, the maize is ripening then and bears are in the fields. This year, however, the maize was late due to a drought. The bears just weren't in the maize with the same frequency of other years. The Andean Bear Project had tried to use dogs in the past, but the local dogs all shook with fear when they scented fresh bear. We decided





that the point of the first week would be for the dog and I to acclimatize to the altitude and see if Sisko would recognize Andean bears' scent as that of a bear.

Sisko proved himself in a maize field near Cazarpamba, a couple hours' walk away from Pucara, where the project is based. We walked to the field and did find some fresh sign, probably from the early morning, but not fresh enough to try to track. While we ate our lunch on a ridge near the field, Sisko suddenly alerted on fresh bear scent in a grove of trees perched on a cliff at the edge of the maize field. We went back around the same time the next day and found the bear again in the same inaccessible place. There was no longer any doubt as to whether Sisko would shake in fear or recognize that was a bear.

We followed up on sightings of bears in maize fields and of a number of incidents of a bear killing cows. The maize fields and the cow pastures in Ecuador can be incredibly steep, and likely due to the difficulty of clearing cloud forest, bear habitat including good bear foods like *suro*, a species of bamboo, grow right next to the fields and pastures. This offers bears good security cover and food on either side of a border easily recognized by humans but not so meaningful to bears. The Andean Bear Project hoped to learn more about bears that kill cows by radio-collaring one. Bringing ecotourism to the area, a radio-collar would suddenly make the bear worth more alive than dead. We spent days hiking around looking for bear sign or following up on sightings in either rain or hot sun in our rubber boots on trails that a mountain goat would be perfectly at home on. Children in the nearby communities got to know Sisko and they would run out to pet him and hold his leash. Having the dog there raised the profile of the project, and reassured people experiencing human-bear conflict that they were being taken seriously.

Working in Ecuador taught me a lot about Andean bears and the challenges in South America in researching them and mitigating conflict. I have new friendships with researchers in South America and I know that this trip was just the

beginning of a new partnership. The Andean Bear Project has seen how useful a good, trained dog can be and now has a puppy they can hopefully train to alert on bear sign. Armando is planning to raise some money to come to Canada in 2011 so he can see how our dog handlers work tracking bears here. Then, back in Ecuador, the project will have a new tool to help them with bear captures and human-bear conflict. 🐾

## Student Highlight: Tyra Meininger Saudland

Brian Scheick  
IBA Student Coordinator

This issue, we will visit with Tyra, a native of Norway who has studied in Europe and worked in the USA. I think her story is a great example of how international bear work can be but also how an internship can be a stepping stone to larger work.

Tyra completed a bachelor in Economics, Politics and International Studies at the University of Warwick in Great Britain. Always interested wildlife and the environment, she decided to pursue a master's degree in Sustainable Resource Management at the Technical University in Munich, Germany. As part of the program, all students were required to gain some work experience abroad. Interested in the human dimensions of wildlife management, especially conflicts between humans and large carnivores, Tyra discovered her interest in bears and chose to volunteer as an intern for a few months in 2008 at the Vince Shute Wildlife Sanctuary (VSWS) in Orr, Minnesota, USA. Her duties included teaching the public about black bears (*Ursus americanus*). The VSWS aims to promote understanding of bears through education and thousands of visitors travel to the Sanctuary every summer to watch and learn about the wild black bears.

Volunteering at the sanctuary prompted Tyra to wonder whether a visit to a place like VSWS influenced visitor attitudes and whether the VSWS educational program was as effective as claimed. She returned to the VSWS in the following summer to conduct a survey about visitors' attitudes towards black bears, the topic of her master's thesis. The goal of the study was to determine which factors influence people's attitude towards black bears. In particular, 1) if experience with bears leads to greater knowledge about them, 2) if experience with bears results in a more positive attitude towards them, and 3) if there is a link between knowledge and attitude.

In the course of a summer, Tyra interviewed 439 visitors and divided the responses into four different target groups: first-time visitors before their visit, returning visitors before their visit, people interviewed during their visit, and visitors interviewed a month after their visit. This was done to establish what effects a visit to the VSWS had on attitudes. She asked questions about black bears to ascertain visitor attitude, fear, interest and knowledge, as well as a section on visitor demographics. When asking about their experiences with bears, she asked if visitors had seen a bear in the wild, performed other activities (lived, hiked, camped, etc.) in areas occupied by bears, or if they'd had any negative experiences with bears.

Tyra found that people who had experience with bears were more knowledgeable than those without (hypothesis 1 accepted). There was no correlation between experience and attitude, even if they'd had negative experiences, nor between knowledge and attitude (hypotheses 2 and 3 rejected). The study thus suggested that educational programs alone are not effective in improving attitudes, since they only increase knowledge. However, experience was correlated with interest, which in turn was correlated with attitude, so experience and attitude might be indirectly related. Although aware of the limitations of sampling on VSWS visitors, Tyra concluded that education should be coupled with programs to raise interest and awareness in order to improve attitudes. Tyra graduated last fall (2010) and is now working towards a PhD in human dimensions of wildlife management.

It makes sense that greater experience should impart greater knowledge but counter-intuitive that experience isn't related to attitude. However, this fits with my experience with people in Florida who had problems with bears. Some blame the bear and some think they or other people are responsible for the attractants. I also find that people often have conflicting views of what are appropriate responses to conflicts with bears (should people or the bear adjust their behavior) and whether they view animals as a group or as individuals (whether the problem bear is a 'bad apple' or bears in general are a nuisance). I would very much like to know if education can change these beliefs. I wonder how an agency's response vs. expectation affects a person's attitude toward bears. I am glad to see that human dimensions of wildlife conflict is becoming a greater topic of research. It is a difficult, multifaceted issue. 🐾

## Recent Bear Literature

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- Anel, L., S. Gomes-Alves, M. Alvarez, S. Borragan, E. Anel, M. Nicolas, F. Martinez-Pastor, and P. De Paz. 2010. Effect of basic factors of extender composition on post-thawing quality of brown bear electro ejaculated spermatozoa. *Theriogenology* 74(4):643-651. Corresponding author email: ppazc@unileon.es.
- Cushman, S. and J. Lewis. 2010. Movement behavior explains genetic differentiation in American black bears. *Landscape Ecology* 15(10):1613-1625. Corresponding author email: scushman@fs.fed.us.
- Crook, A. C. and M. J. Chamberlain. 2010. A multiscale assessment of den selection by black bears in Louisiana. *Journal of Wildlife Management* 74(8):1639-1647. Corresponding author email: mchamb2@lsu.edu.
- Doko, T., H. Fukui, A. Kooiman, A. G. Toxopeus, T. Ichinose, W. Chen, and A. K. Skidmore. 2010. Identifying habitat patches and potential ecological corridors for remnant Asiatic black bear (*Ursus thibetanus japonicus*) populations in Japan. *Ecological Modeling* 222(3):748-761. Corresponding author email: dokochan@sfc.keio.ac.jp.
- Ebert, C., F. Knauer, I. Storch, and U. Hohmann. 2010. Individual heterogeneity as a pitfall in population estimates based on non-invasive genetic sampling: a review and recommendations. *Wildlife Biology* 16(3):225-240. Corresponding author email: cebert@gmx.de.
- Figueirido, B., P. Palmqvist, J. A. Pérez-Claros, and W. Dong. 2010. Cranial shape transformation in the evolution of the giant panda (*Ailuropoda melanoleuca*). *Naturwissenschaften*. Published online December 2010 Springer. Corresponding author email: Francisco.figueirido@uv.es.
- Fink, T. and V. Zachar. 2010. P61. Adipose-derived stem cells from the brown bear (*Ursus arctos*) spontaneously undergo chondrogenic and osteogenic differentiation. *Differentiation* 80(1):S37. Corresponding author email: trinef@hst.aau.dk.
- Goda, N., T. Mano, P. Kosintsev, A. Vorobiev, and R. Masuda. 2010. Allelic diversity of the MHC class II DRB genes in brown bears (*Ursus arctos*) and a comparison of DRB sequences within the family Ursidae. *Tissue Antigens* 76(5):404-410. Corresponding author email: masudary@ees.hokudai.ac.jp
- Gong, M., Z. Yang, W. Yang, and Y. Song. 2010. Giant panda habitat networks and conservation: is this species adequately protected? *Wildlife Research* 37(6):531-538. Corresponding author email: songyl@ioz.ac.cn.
- Hu, Y., X. Zhan, D. Qi, and F. Wei. 2010. Spatial structure and dispersal of giant pandas on a mountain-range scale. *Conservation Genetics* 11(6):2145-2155. Corresponding author email: weifw@ioz.ac.cn.
- Kersey, D. C., D. E Wildt, J. L. Brown, Y. Huang, R. J. Snyder, and S. L. Monfort. 2010. Parallel and seasonal changes in gonadal and adrenal hormones in male giant pandas (*Ailuropoda melanoleuca*). *Journal of Mammalogy* 91(6):1496-1507. Corresponding author email: dkersey@western.edu.
- Kinoshita, K., H. Morita, M. Miyazaki, N. Hama, H. Kanemitsu, K. Kawakami, P. Wang, O. Ishikawa, H. Kusonoki, and R. Tsenkova. 2010. Near infrared spectroscopy of urine proves useful for estimating ovulation in giant panda (*Ailuropoda melanoleuca*). *Analytical Methods* 2(11):1671-1675. Corresponding author email: rtsen@kobe-u.ac.jp.
- Li, S., D. Wang, X. Gu, and W. McShea. 2010. Beyond pandas, the need for a standardized monitoring protocol for large mammals in Chinese nature reserves. *Biodiversity and Conservation* 19(11):3195-3206. Corresponding author email: lis@si.edu.
- Macbeth, B. J., M. R. L. Cattet, G. B. Stenhouse, M. L. Gibeau, and D. M. Janz. 2010. Hair cortisol concentration as a noninvasive measure of long-term stress in free-ranging grizzly bears (*Ursus arctos*): considerations with implications for other wildlife. *Canadian Journal of Zoology* 88(10):935-949. Corresponding author email: bjm197@mail.usask.ca.

# Publications

- Obbard, M. E., M. B. Coady, B. A. Pond, J. A. Schaefer, and F. G. Burrows. A distance-based analysis of habitat selection by American black bears (*Ursus americanus*) on the Bruce Peninsula, Ontario, Canada. *Canadian Journal of Zoology* 88(11):1063-1076. Corresponding author email: martyn.obbard@ontario.ca.
- Reynolds, J. H., W. L. Thompson, and B. Russell. 2010. Planning for success: Identifying effective and efficient survey designs for monitoring. *Biological Conservation*. In Press, Corrected proof available online. Corresponding author email: joel\_reynolds@fws.gov.
- Schwartz, C.C., S. L. Cain, S. Podruzny, S. Cherry, and L. Frattaroli. 2010. Contrasting activity patterns of sympatric and allopatric black and grizzly bears. *Journal of Wildlife Management* 74(8):1626-1638. Corresponding author email: chuck\_schwartz@usgs.gov.
- Shepherd, C. R. and L. A. Shepherd. The poaching and trade of Malayan sun bears in Peninsular Malaysia: New legislation to provide stronger deterrents. 2010. *Traffic* 23(1):49-52. Corresponding author email: cstea@po.jaring.my.
- Smulders, M., T. A. Nelson, D. E. Jelinski, S. E. Nielson, and G. B. Stenhouse. 2010. A spatially explicit method for evaluating accuracy of species distribution models. *Diversity & Distributions* 16(6):996-1008. Corresponding author email: trisalyn@uvic.ca.
- Støen, O-G., W. Neumann, G. Ericsson, J. E. Swenson, J. Dettki, J. Kindberg, and C. Nellemann. 2010. Behavioural response of moose *Alces alces* and brown bears *Ursus arctos* to direct helicopter approach by researchers. *Wildlife Biology* 16(3):292-300. Corresponding author email: ole.stoen@umb.no.
- Zeyl, E., D. Ehrich, J. Aars, L. Bachmann, and Ø, Wiig. 2010. Denning-area fidelity and mitochondrial DNA diversity of female polar bears (*Ursus maritimus*) in the Barents Sea. *Canadian Journal of Zoology* 88(12):1139-1148. Corresponding author email: eve.zeyl@nhm.uio.no.
- Zhao, H., J. R. Yang, H. Xu, and J. Zhang. 2010. Pseudogenization of the umami taste receptor gene *Tas1r1* in the giant panda coincided with its dietary switch to bamboo. *Molecular Biology and Evolution* 27(12):2669-2673. Corresponding author email: jianzhi@umich.edu.
- Zhu, L., X. Zhan, H. Wu, S. Zhang, T. Meng, M. W. Bruford, and F. Wei. 2010. Conservation implications of drastic reductions in the smallest and most isolated populations of Giant Pandas. 2010. *Conservation Biology* 24(5):1299-1306. Corresponding author email: weifw@ioz.ac.cn. 🐼

# Events

## 20th Eastern Black Bear Workshop: 1-4 May 2011

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The 20th Eastern Black Bear Workshop (EBBW) will be hosted in May 2011 by the North Carolina Wildlife Resources Commission (NCWRC). The workshop will be held at the Kanuga Conference Center, Hendersonville ([www.kanuga.org](http://www.kanuga.org)), in western North Carolina, near Asheville, the Nantahala National Forest, the Blue Ridge Parkway and the Great Smoky Mountains National Park.

The 20th EBBW will be a working session designed for biologists and researchers involved with bear population management and monitoring. The agenda is posted at [www.ebbwnc.org](http://www.ebbwnc.org) and covers a range of topics, including bear population estimation and modeling, research updates, impacts of highways on bear populations, and wind turbine issues. There will be three workshop sessions, a poster session, and a limited oral paper session. There will also be a meeting for members of the Northeast Black Bear Committee and a meeting for all southeastern black bear biologists and researchers.

## Papers and Posters

The first call for presentation and poster abstracts showcasing your recent work in bear research and management will be from 1 December 2010 to 30 January 2011. We have a limited number of presentation slots available. All accepted oral presentations will be held on the morning of 4 May 2011. Details on the guidelines, as well as the required submission form, can be found on the website indicated above.

## Lodging, Travel and Registration Information

Room rate: US\$103.00 a night (approximate)

Student rate: US\$88.75 a night

Room rates includes lodging and meals.

Free wireless internet is available in the main inn lobby and in the main meeting room.

Registration fee: US\$75 regular (includes copy of proceedings and banquet)

US\$50 student (includes copy of proceedings and banquet)

US\$100 for registration after 15 March 2011

Nearest airport: Asheville Regional Airport, NC (20 miles), Greenville-Spartanburg International Airport, SC (60 miles), or Tri-Cities Regional Airport, TN (110 miles). We can provide shuttle service from Asheville Regional Airport to Kanuga Conference Center. 🚗

## IBA Conference 2011: workshop announcement

Russ Van Horn

Institute for Conservation Research of San Diego Zoo Global

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Announcing a workshop at IBA 2011 on facilitating collaborative partnerships to improve research, conservation, and husbandry of captive and free-ranging bears.

This workshop has two goals: First, to highlight the opportunities and challenges of collaboration and information exchange between people working in research, conservation, and husbandry of bears, whether captive or free-ranging. Second, to craft a plan for how the IBA, AZA and other institutions and organizations can facilitate this type of collaboration and communication.

The intended audience is field researchers, especially those working on species outside of North America, and representatives of zoos and other captive husbandry organizations. During this workshop panelists will use several case studies to illustrate the power of collaboration between field researchers and those studying captive bears, followed by a discussion of the challenges to these and other collaborations and how institutions, perhaps including the IBA and zoological associations, might help mitigate these challenges to facilitate collaboration and improve bear research, conservation, and husbandry. 🚗

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

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

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Please list major field of study \_\_\_\_\_

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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 mail or fax both sides of this form to address on previous page.**

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<u>Ursus Journal &amp; IBA Conference Proceedings *</u>			Cost (US\$)	Quantity	Total
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<i>The Status and Conservation of the Bears of the World</i>					
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<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>					
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## 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.

**Deadline for the May 2011 issue is 5 April 2011**

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