



# International Bear News

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

May 2003 vol. 12, no. 2

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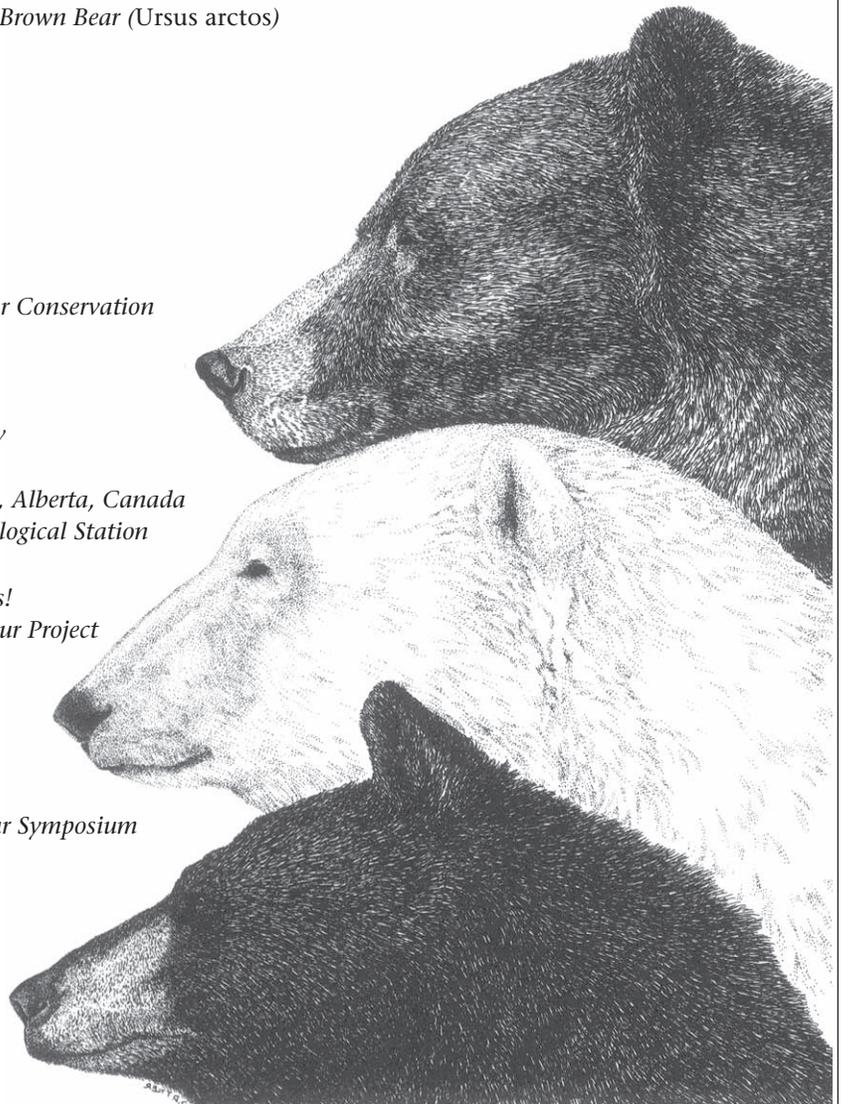
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## From the President

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Looking out my window in Alaska, the first Canada geese are arriving after an absence of almost seven months, and I just watched a red fox prance by in the field next door. The snow is melting and adult male brown bears have been out of their dens for several weeks. By the time you read this, last year's pregnant females will have emerged from seven months in winter dens followed by tiny cubs. Life is good for bears in my world.

Life is not as good for bears in many other habitats around the world. IBA members dedicate their lives to conserve what is left of bear habitat and to ensure that future generations of bears remain integral parts of ecosystems where they now exist. This is our charge and ethical responsibility and among the reasons we have come together as an association.

### International Concerns

We are an international organization, but the majority of our members are in the U.S. and Canada. We have a smaller but growing contingent of members in Eurasia and Latin America, where most of the world's bear species live and where bear populations are often in decline. IBA Council has spent considerable time discussing ways in which we can improve international representation in both membership and leadership roles. You can look forward to discussion of various approaches to accomplish this goal in an upcoming newsletter. Meanwhile, share your

ideas with us. Ways to achieve more diverse representation in the Council can be accomplished through the electoral process, through appointments, or a combination of the two. Again, think about this during the upcoming nominations and voting process (see page 4).

The cost of IBA membership can be prohibitively high in many countries. It is often only through donations from you that membership is possible for many people (use the form on page 33 to donate a membership).

### San Diego Meetings

Workshops sponsored by the American Zoo and Aquarium Association Bear Taxon Advisory Group and an inter-agency group to address bear-human conflicts will be held immediately prior to the 15th IBA conference in San Diego, February 2004 (see page 30). Exchange between captive and wild bear research has been underutilized and offers advantages to both disciplines—consider exploring what each has to offer and how it might benefit your individual interests.

Please note the San Diego call for papers on page 30. The deadline for abstracts is 15 September 2003.

### Students & San Diego

Student Coordinator Diana Doan-Crider and students worldwide will be organizing a student forum for the conference. In addition, students will be working with the American Zoo and Aquarium Association Bear Taxon Advisory Group (TAG) to hold a silent auction the evening before the conference. This is a long-standing and successful fundraising tradition for the Bear TAG and they have agreed to work with students for this effort. Items donated by Bear TAG and IBA members will be auctioned and the proceeds split

between our two organizations. Money raised by the students will help subsidize future attendance to conferences and IBA memberships for those who cannot afford them. Donations can include the opportunity to accompany field researchers during den examination or to work with positive reinforcement of captive bears to gather physiological data. Keep this in mind when students ask for donations.

### Electronic Newsletter

We received only 11 responses to the question about providing the newsletter in PDF format. Therefore, we will continue to offer hard copy. Back issues of the newsletter are available as PDFs at [www.bearbiology.com](http://www.bearbiology.com).

### Slovenia Hunting & U.S. Bear Baiting

IBA Council recently provided written testimony on two conservation issues. IBA encouraged the government of Slovenia, through the European Union, to reconsider a plan that sets brown bear harvests too high. The best scientific estimate of sustainable yield indicates that Slovenia's proposed harvest would result in substantial decline in the country's brown bear population. IBA Eurasian Vice President Jon Swenson and Council member Djuro Huber, representing the IBA, are meeting with Slovenian government officials to help resolve this problem.

Council voted to oppose proposed legislation that would ban baiting of American black bears on U.S. federal lands (H.R. 1472). This ignores state black bear management regulations that have enabled black bear populations to thrive in all jurisdictions where baiting is allowed. Closely regulated use of baiting as a hunting technique can reduce human-bear conflicts; can limit the types of bait

used; can lower rates of wounding losses; can provide more humane quick kills; and can allow hunters to avoid killing females with cubs.

## IBA & BSG

With the concurrence of the IUCN's (World Conservation Union) Species Survival Commission (SSC), the Bear Specialist Group (BSG) maintains a close affiliation with IBA. This connection was established because IBA includes most of the world's bear specialists among almost 800 members from 47 countries. In 2001, SSC directed IBA to select the BSG Chair. Subsequently, the IBA Council voted to appoint the IBA President as BSG Chair, with the IBA Past President as BSG Vice Chair to provide continuity.

IUCN/SSC agreed to this arrangement because of the overlap in function between IBA and the BSG. It was also in recognition that IBA holds regular meetings about world-wide bear conservation, ecology, research and management. *Ursus*, our annual scientific journal, and *International Bear News*, our newsletter, both serve as official BSG publications. These are all functions that SSC requires of specialist groups. Beginning with the next IBA/BSG conference in San Diego in February 2004, all conferences will include working meetings of the Bear Specialist Group.

The BSG includes all bear species except the polar bear, which has its own specialist group. Past BSG efforts focused on producing the IUCN *Status Survey and Conservation Action Plan*, compiled by C. Servheen, S. Herrero and B. Peyton.

The newly re-organized BSG is composed of eight Expert Teams: one each for Andean bears, Asiatic black bears, brown bears in Europe, brown bears in Asia, giant pandas, sloth

bears, sun bears, and a team for trade in bears and bear parts. Our goal is to have each Expert Team chaired or co-chaired by residents of the region where individual species exist. There will also be a Coordination Committee to support and coordinate information/program/funding efforts for the eight Expert Teams. This committee will also serve to address conservation issues for North American brown bears and American black bears, both of which are relatively secure on a continental basis.

The Expert Team chairs/co-chairs and the Coordination Committee have been selected. Members for the Andean bear, European brown bear, sloth bear, sun bear and bear trade teams have been selected. Other teams are progressing toward that goal.

The first task of the Expert Teams is to re-evaluate action plans to list all research, management, conservation, and education measures that need to be considered for their species/region of responsibility. Their second task will be to assign each measure a priority for conservation importance. These ratings will be based on global bear conservation, efficacy, and feasibility given available funding sources. The updated priorities for action will help bring international attention to bear conservation including the need for specific programs and funding to accomplish them. IBA's Grants Program Committee will use the priorities to assist their review and funding of conservation and research projects. The most funding available to the grants program was US\$37,000 for 2003 (see page 6). Clearly, more is needed. Strengthening ties between IBA and BSG should increase support for bear conservation and research internationally and foster commit-

ment of in-kind matching support and monetary donations.

IBA is composed of strictly volunteer members, but the expertise and dedication of our members represents an enormous reservoir of talent to accomplish our goals. IBA maintains about \$80,000 +/- \$30,000 in its treasury. Our primary expenditures are publication of *Ursus*, IBA's journal; printing our newsletter, *International Bear News*; holding conferences and workshops; and funding conservation projects. The IBA Grants Program prefers projects in developing countries and those where our small amount of money can make the greatest difference for conservation.

The IBA has an Economic Development Committee, whose members include both biologists and successful business people. This committee's charge is to establish an endowment fund to provide more funding for IBA and BSG objectives. The initial goal is to raise \$300,000, to fund projects most likely to achieve meaningful conservation success and to further our mission. As these efforts are successful, much greater support by individuals and corporations is likely. Your involvement and suggestions for improving our effectiveness to meet our goals are welcome. Contact me or any member of Council (contact information on page 32) to volunteer or make comments.

## IBA Election: Call for Nominations

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### Nominations

The IBA Nominations Committee invites all IBA members to nominate themselves or others to run for office in the IBA. Being an officer in the IBA provides you with an additional and important means to help advance the management of bears around the world. The IBA will only be a successful organization if we continue to get committed and competent people to run for office. Persons nominated for these positions must be IBA members, agree to run for office, and actively contribute if elected.

Offices open during this election are President, Americas Vice President, Secretary, Treasurer, and four seats on Council. All positions are elected for three-year terms. Job descriptions follow. The Americas Vice-President must be from North, Central or South America. The Treasurer must live in the U.S. (because of the need to comply with tax-reporting requirements for IBA as a U.S. non-profit, tax-exempt corporation). Nominees for other positions can live anywhere in the world and the Nominations Committee encourages persons from under-represented areas to run for office. If a geographically diverse slate of candidates is not elected, Council may appoint up to two additional members to help achieve geographic balance on Council.

Any IBA member may volunteer to run for any of these offices. If you nominate someone, you must obtain

their agreement that they will run for office and serve if elected before submitting their name(s) to the Nominations Committee. All candidates must be IBA members. The Nominations Committee will provide a list of current candidates in the August newsletter. Nominations are open until November 8, 2003. Candidate statements for the ballot are also due by November 8, 2003. Candidate statements and ballots will be mailed to IBA members in December 2003.

The Nominations Committee is Bruce McLellan, Chair ([bruce.mclellan@gems9.gov.bc.ca](mailto:bruce.mclellan@gems9.gov.bc.ca)), Sterling Miller ([MillerS@nwf.org](mailto:MillerS@nwf.org)), Djuro Huber ([Huber@mavef.vef.hr](mailto:Huber@mavef.vef.hr)), and Teresa DeLorenzo ([ibanews@bearbiology.com](mailto:ibanews@bearbiology.com)). See page 32 for complete contact information for Nominations Committee members.

Election results will be announced at the February 2004 conference in San Diego and new officers will begin serving their terms at that meeting.



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### Council Job Descriptions

The elected Council conducts the business of the IBA and it is therefore important that a variety of dedicated members run for these positions. So IBA members are familiar with the duties and workload of each position, the current Council offer these guidelines.

The Council includes five officers: President, Vice President-Americas, Vice President-Eurasia, Secretary and Treasurer; and six Council members, five elected by the membership plus the Past President. The elected Council may appoint up to two additional members to obtain better geographic representation on Council.

#### Councillor

The primary job of a Councillor is to understand, comment on, and propose issues of IBA policy and positions. Council members should be familiar with the IBA bylaws and mission statement and use these as guidelines in voting on issues brought before the Council. Council members should have access to email and respond promptly with their comments and votes. Council members should be able to attend at least one and preferably all of the regularly scheduled conferences of the IBA. Council members should also be willing to serve on standing IBA committees when asked (e.g. nominations, publications, publication sales, conferences, grant review, development, etc.). A Councillor should be prepared to spend at least two hours per week on IBA issues.

#### Vice Presidents

The duties of the Vice Presidents are the same as those of Councillor with the addition of acting for the President on occasions when the President is unavailable. The Vice Presidents should be prepared to spend at least two hours per week, but at times significantly more. The

## Ursus Website and Volume 14

Vice Presidents should be prepared to be especially involved in issues throughout their respective geographic areas—Americas and Eurasia.

### Secretary

In addition to the duties described for the Councillor, the Secretary is a primary contact for the membership and the public, and thus answers questions about IBA, its functions, membership, policies, publications, website, etc. The Secretary is responsible for updating the membership database, and providing mailing labels for the newsletter. The Secretary archives information such as past minutes, decisions/votes/policies, copies of newsletters, conference bids, travel grant requests, etc.; drafts minutes; and coordinates with the webmaster. This is an important job that may require ten hours per week.

### Treasurer

In addition to the duties described for the Councillor, the Treasurer is responsible for maintaining all financial records of the IBA including records of all receipts and payments. The Treasurer processes and deposits the large volume of receipts from membership dues, publication sales, and charges relating to *Ursus* including processing credit card orders. The Treasurer works with the editor of *Ursus* to issue and track invoices for page charges and reprint orders. The Treasurer also issues checks for special grants and donations (such as the IBA Grants Program). The Treasurer pays all bills relating to IBA business, such as payments to contractors, newsletter costs, conference contributions, and other expenses. The Treasurer provides Council with an annual financial accounting of revenues and expenses by category and projections of anticipated expenses and income. The treasurer is responsible for

managing assets in mutual funds, certificates of deposits and other accounts. Finally, the Treasurer ensures that the IBA's U.S. non-profit, tax-exempt status is maintained; this requires filing an annual tax return on behalf of the IBA. The Treasurer can hire accountants and other assistants to handle certain tasks. Because of the need to file U.S. tax returns, the Treasurer should be based in the U.S. This is an important job that may require ten hours per week.

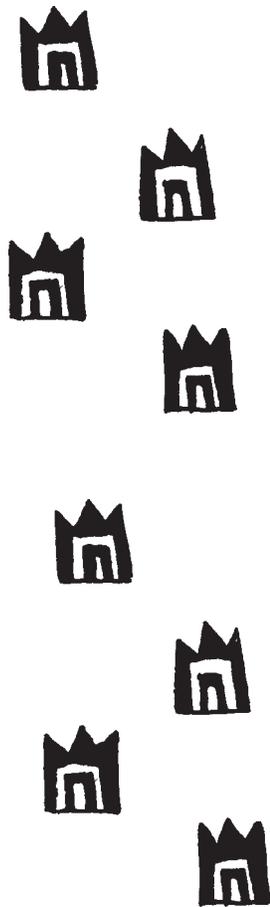
### President

In addition to duties described for the Councillors, the President oversees the overall function of IBA, chairs meetings, and coordinates discussions by Council. After suitable discussion, the President may call for and record votes. The President has primary responsibility for obtaining bids to host upcoming IBA conferences. The President is often the major spokesperson for the IBA and is a primary contact for the membership, other professional organizations, and the public. The President writes a column for the newsletter, and prepares comments and letters on issues relevant to the IBA or bears in general. In cooperation with the Secretary, the President maintains a record of correspondence. The President is currently Chair of the Bear Specialist Group of the IUCN/SSC, but this task will likely be transferred. The President oversees existing committees and has the ability to create and appoint committees that will, under his authority, deal with certain IBA tasks. A comprehensive job can demand fifteen hours per week and the workload is relatively consistent over the term.

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IBA's scientific journal, *Ursus*, now has its own website: [www.ursusjournal.com](http://www.ursusjournal.com).

*Ursus* volume 14, number 1 will soon be in the mail. See page 28 for its contents. Membership now includes both the newsletter and *Ursus*. Use the form on page 33 to join IBA and receive both.



## IBA Grants Program Report

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The Grants Program Committee received 31 proposals during this review cycle. The combined requests for funding totaled nearly \$200,000. The committee had \$36,980 available from the John Sheldon Bevins Foundation (\$12,750) and other donations (\$24,230). The challenge grant contributed anonymously by a major donor and the gifts from those who helped exceed the challenge made a great difference in our ability to support projects around the world. See the table below for a summary of grants awarded.

The committee again has placed highest priority on those species, populations and regions deemed to be in need of the greatest help. This has meant that many, many excellent proposals were not funded by IBA. We hope that the program's

funds will continue to grow and make it possible to fund more projects from parts of the world that seem to be less critical and thus have received relatively less IBA grant support.

Anyone interested in submitting a proposal in the 2003-2004 review cycle should follow the guidelines listed below.

1. All proposals should be submitted electronically unless this is really impossible.

2. Submitters should send all documents in MS Word format, Adobe pdf, or in a format that can be converted to MS Word easily such as plain ASCII text. Please do not use WordPerfect.

3. Proposals may be submitted at any time; they will be held for the next review. Normally there will be only one review each year. The review will begin shortly after the start of the calendar year.

4. All proposals must be received before midnight on 31 December. Any received after that will be held for the next year's review.

5. Proposal forms may be downloaded from the IBA website, [www.bearbiology.com](http://www.bearbiology.com); these may be used directly or as a model.

The committee again extends its thanks to all of those who have supported the program making it possible to increase the number of projects supported. A PowerPoint presentation is in development which should assist the Economic Development Committee in its fundraising work.

It takes a significant time commitment to review all of these proposals. Committee members Todd Fuller, Jörg Rauer, Jon Swenson and Gordon Warburton all deserve many thanks for a lot of work. Fuller and Warburton have been with the committee since 1993!

Progress reports from grant recipients will appear in this newsletter on a continuing basis. See page 10 for a report on the Kamchatka bear study which received IBA grant funds.

IBA Grants Program: 2003 Grants					
Name	Student?	Species	Location	Topic	Amount
Armando Castellanos	No	<i>Tremarctos ornatus</i>	Ecuador - Imbabura	Habitat use, home range, activity patterns	\$5,000
Glen Contreras	No	All	Worldwide	Travel grant supplement	\$5,000
Marta DeBarba	Ph.D.	<i>Ursus arctos</i>	Italy - Alps	Genetic monitoring of small population	\$4,500
Gary Galbreath	No	<i>Ursus thibetanus</i>	Cambodia, Laos, Thailand	Mitochondrial map for southeast Asia	\$4,600
Shaenandhoa Garcia-Rangel	Ph.D.	<i>Tremarctos ornatus</i>	Venezuela	Distribution, habitat selection, & landscape use	\$4,000
Bernhard Gutleb	No	<i>Ursus thibetanus</i>	Iran	Distribution and status	\$5,000
Shyamala Ratnayeke	No	<i>Melursus ursinus</i>	Sri Lanka	Ecology and status in 2 national parks	\$5,000
Ximena Velez-Liendo	Ph.D.	<i>Tremarctos ornatus</i>	Bolivia	Habitat fragmentation in the Bolivian Tropical Andes	\$3,750

## The Sun and Moon in Thailand

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Bear research in Thailand has been underway for over one year now, within the Thung Yai Naresuan Wildlife Sanctuary, located along the Thai-Burma border. The work is producing a picture of habitat use and feeding ecology of sun bears and moon bears, mainly through study of their signs in different forest types.

Some key ecological and methodological questions I am investigating in this project include:

(1) What is the relationship between density of bear signs (especially claw marks on trees since these are by far the most common signs encountered) and bear abundance?

(2) What is the relationship between species of trees climbed and bear feeding ecology or behavior (climbing for food? rest?).

(3) Can claw marks on trees be "aged," to interpret deposition rate for example, or correlation with fruiting phenology?

(4) Can sun bears and moon bears be differentiated based on characteristics of the claw marks they leave on trees?

Preliminary results show the mean density of climbed trees ("bear-trees") in different habitats ranges from about 10/ha in mixed deciduous forest, to 30-40/ha in denser semi-evergreen forest. Bears are climbing over 60 tree species from 30 families in semi-evergreen forest, and about 40 species from 20 families in the less species-rich mixed deciduous forest.

The terms mixed deciduous forest (MDF) and semi-evergreen forest (SEF) may not be familiar to many people, because these forest types are unique to mainland Southeast Asia and parts of India, and have received comparatively little attention from researchers. MDF and SEF often occur together in complex mosaics determined by soil, topography and aspect. Unlike evergreen rain forests characteristic of regions closer to the equator, MDF and SEF occur where annual rainfall is lower, and unevenly dispersed due to a long dry season.

As part of my research in Thung Yai, I am establishing 1-2 ha standard vegetation plots in MDF and SEF, in which trees of 10 cm dbh and larger are measured and identified. This work will help quantify tree species composition, density and population structure, and I will be especially interested in aspects that are important for bears, such as density and variability of bear-tree species. These forest types represent two of the three major plant communities that characterize mainland Southeast Asia (the other is dry dipterocarp forest), and I hope the present research will improve our understanding of how they function as habitats for bears in this poorly known region.

So far I have spent most of my time in MDF and SEF because they are the dominant forest types in the wildlife sanctuary. There are two other forest types present that deserve mention: montane evergreen forest and savanna. These are much less extensive within Thung Yai, and generally throughout mainland Southeast Asia as well, but recent investigation suggests that at least montane evergreen forest may be significant for bears.

In order to provide a broader context in which to assess my main focal habitats of SEF and MDF, last month my team and I ascended the highest mountain range in Thung Yai (1,811 m) to establish a study site. I accomplished much less than hoped as much time was spent scouting around and we ran out of food early, but the bear transects we did complete were worth the effort. I found that bear-tree density was high, with a mean of almost 40 trees per ha. This figure is similar to bear-tree densities at some of my SEF sites, but in contrast to SEF, bear-tree species in the montane forest are heavily concentrated in a few families—notably Fagaceae, Lauraceae and Theaceae. One of the common bear-trees in the latter family turned out to be a new record for this part of Thailand, *Camellia colorata*.

The most exciting result from my research in this remote and beautiful forest type, however, was what I did not find: sun bear signs. Preliminary results in MDF and SEF suggest that moon bears and sun bears occur in the same habitats at the same places, though moon bears are less abundant. Above about 1,100 m however—in montane evergreen forest—only moon bear signs were found. This is the first indication I have seen that suggests any habitat segregation between these species, but cautious interpretation of these results is in order because the data come from just one site, and work on species identification from signs is still preliminary.

## The Sad State of Sun and Moon Bears in Vietnam



© Gabriella Fredriksson

Caged Sun Bear in Vietnam

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Last month I paid a first visit to Vietnam and was quite taken aback by the bear conservation situation there. The large number of bears held in captivity in Hanoi and other places throughout the country, and the quick turnover of bears reflects the high pressures on the remaining wild populations. Jill Robinson from the Animal Asia Foundation (<http://www.animalsasia.org>) reported that in Hanoi alone, at least 700 bears are in captivity and other estimates report that at least 2,000-4,000 bears are being kept for bile extraction throughout Vietnam—with the industry still expanding. Smuggling

of live bears as well as bear parts (and a myriad of other wildlife products) to China is also reported to be actively ongoing. The practice of keeping bears for their bile in Vietnam differs substantially from the large government and private farms in China where hundreds of bears are kept in one farm (see also—<http://www.wspa.ca/thebearbilebusiness.html>). In Vietnam the practice is scattered and small numbers of bears are kept in tiny cages in backyards of individual homes. In Hanoi bears can still be found in small cages in restaurants—being “live” tapped during dinner for

## Sun Bear Research on the Web

their bile. Whereas in China the main bear species used for the bile is the moon bear, in Vietnam the ratio of sun bears is much higher.

Recently the moon bear was placed in "group I protection" (highest protection status in Vietnam) joining the sun bear, which had already been fully protected since 1992. This now makes hunting, keeping and exploitation of both bear species for the bile industry illegal. The subsequent problem coming up now is what to do with the thousands of bears held in captivity? Already the Forest Protection Departments from a number of districts have been questioning what to do with these bears. Should certain bears be released? Who is going to fund and manage the large number of rescue centers which would be required? How is the demand going to be curbed? How will this affect the remaining wild bear populations? Hunting levels in Vietnam are extremely high and it seems that all wildlife species are being targeted—both for the huge medicinal trade as well as for bushmeat. Interviews about the presence of bears in villages close to remaining forest fragments in the north of the country were met with surprise as populations had dwindled greatly. I was told that an animal which is worth more than one year's wages is of course a prime target, regardless of the enhanced legal status of the bears.

It has also become clear that very few organizations or researchers are focusing specifically on bear conser-

vation issues in mainland Southeast Asia. Indeed many other species are much closer to the brink of extinction and have far smaller distribution ranges, but it seems clear that this lack of interest in bear conservation could soon result in the extirpation of wild populations in Vietnam and Laos. With the current rate of bear hunting on the mainland of Southeast Asia, there is also a fear that demand for bear products will shift to Indonesia, where presently the bear trade is still in its infancy.

A more active dialogue between the IBA and other relevant organizations should be initiated concerning the Southeast Asian bear bile trade and hunting issues, which should result in recommendations and clear action plans. In the very near future new conservation-related activities and basic surveys should be set up in several countries within the range of the sun and moon bears.

The IBA/BSG Sun Bear Expert Team would like to further this topic and rekindle the dialogue. Please contact me at the address above or

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if you have information to share or would like to become involved.

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My master's thesis on the ecology of the Malayan sun bear is available at <http://www.carnivoreconservation.org>. Several photos of sun bears taken from camera traps can be also downloaded.

This research project could not have been done without the support, guidance, help, hard work and dedication of many people. Thanks to everyone who helped.

I hope you find the information interesting and useful for the conservation of this little known bear.

## The Geographical Ecology of the Kamchatka Brown Bear (*Ursus arctos*)

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The project includes: (1) an investigation into habitat selection patterns of radio-collared brown bears in the South Kamchatka Sanctuary, and (2) an examination of population differentiation, genetic diversity, and the systematics of the Kamchatka brown bear and the influence of landscape factors on these patterns.

Various landcover databases and maps were developed for the South Kamchatka Sanctuary. Accuracy rates of 85% were achieved. DNA was extracted from over three hundred bear tissue samples. Mitochondrial DNA was sequenced and haplotypes identified for nearly three hundred bears. Nineteen microsatellite loci were amplified and gels were run for nearly three hundred bears.

### Primary Research Questions

Do more complex models that address landscape mosaic patterns, such as measures of heterogeneity, interspersion, habitat associations, etc., better explain habitat use patterns than more conventional habitat use models based solely on dominant landcover type?

Do microsatellite data from Kamchatka brown bears reveal population differentiation or panmixia across the landscape?

Do landscape-based models incorporating “permeability” or favorability of the landscape offer a satisfactory explanation for this geographic structure?

Do mtDNA data of Kamchatka brown bears reveal population differentiation across the landscape?

Do landscape-based models incorporating “permeability” or favorability of the landscape offer a satisfactory explanation for this geographic structure?

Do genetic diversity levels vary across the peninsula?

Does skull morphology vary across the peninsula?

Are these patterns concordant with genetic patterns?

### Habitat Selection

We captured and fitted eleven adult bears with GPS-ARGOS collars and monitored them over three years. Landsat thematic mapper satellite images were digitized, and georectified. Seventy-five percent of the data (app. 13,500 pixels) collected from field training sites, videography, and a declassified reconnaissance photograph were incorporated into numerous models to create landscape databases and maps. Models limited to twelve land classes were found to be most informative. The remaining 25% of the data (app. 4,500 pixels) was used to test the accuracy of the databases.

Radio-locations for four bears were incorporated into the landcover database. Radio-locations from the remaining seven bears are being entered into the database.

### Skull Morphology

Morphological measurements were made on 86 bear skulls from museum specimens collected throughout the Kamchatka Peninsula.

### Genetics

Leacock and Valentsev collected nearly 450 tissue samples from Kamchatka brown bears either captured during the project or harvested by hunters during the years 2000-2001 from known locations. Valentsev collected an additional 45 tissue samples in 2002, half of which came from the northern Kamchatka Peninsula—an area not adequately sampled in previous years.

DNA was successfully extracted from tissue samples of nearly 300 bears. Nineteen microsatellite loci were amplified from these 300 tissue samples.

### Goals for Next Year

**Habitat:** Develop a logistic regression model incorporating measures of heterogeneity, associations among habitat types, interspersion, distances to salmon spawning streams, distances to *Pinus pumilla*, *Vaccinium*, and *Empetrum* stands, and topographic features to compare used versus unused habitat. Compare this model to a logistic regression model based on a more simplistic conventional approach in which habitat is defined as the dominant cover type around a radio-location.

Develop a landcover map for the entire Kamchatka Peninsula.

**Genetics:** Extract and run sequences and microsatellites for about 25 of the 45 additional tissue samples.

Analyze microsatellite and sequence data and develop a best model(s). Three models will be explored and compared for determining genetic structure and population differentiation from microsatellite data

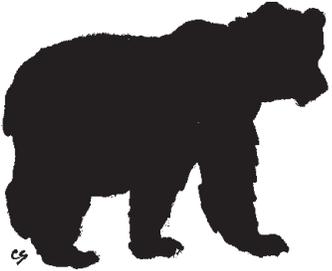
### Collaborators

Collaborators on this project include Alexander Valentsev, Kamchatka Institute of Ecology and Nature Management, Petropavlovsk-Kamchastky, Russia; Ilya Shevchenko, Kamchatka Institute of Ecology and Nature Management, Petropavlovsk-Kamchastky, Russia; Lisette Waits, University of Idaho, Moscow, Idaho, USA.

### IBA Grant

This project received support from the IBA Grants Program (see page 6).

## Cubs in Sweden on Internet



Press release, Orsa Grönklitt, Sweden.

Predator enthusiasts have a new opportunity to follow life in a bear den via the internet. For the second year, a web camera is recording one of the bear dens at Orsa Grönklitt in Sweden, one of Europe's largest bear parks. The web camera will follow the mother bear Ebba and her cubs' movements and development until they leave the bear den in spring. Bear researchers will soon know how many cubs Ebba has. When they are born they are no bigger than a squirrel and lie tight against their mother, embedded in her fur. Pictures, updated every other minute, are at [www.orsa-gronklitt.se](http://www.orsa-gronklitt.se).

Orsa Grönklitt first offered an internet bear den visit in January 2002. The camera project was the first of its kind and received an enormous response from all over the world. During the three months that the camera was placed in the den, more than 400,000 visitors were recorded from over 80 different countries.

"One of the park's main goals is to provide knowledge about Swedish predators. Thanks to the internet we can reach out to the whole world with knowledge and facts," says Mikael Ahlerup, Managing Director at Orsa Grönklitt.

The web project is a collaboration between Orsa Grönklitt and The Scandinavian Bear Project (Skandinaviska Björnprojektet).

## Alaska

Alaska news provided by:  
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Alaskans, send your news to the address above.

## Fischbach New Kodiak Bear Biologist

Tony Fischbach reported to the Kodiak National Wildlife Refuge (KNWR) in November 2002 as the refuge's new bear biologist. KNWR had been without a bear biologist since the retirement of Vic Barnes (who actually worked for U.S. Fish and Wildlife Service's research division and later for the USGS Biological Resources Division, not for the refuge) in late 1997. Tony previously worked for Steve Amstrup (USGS Biological Resources Division) studying polar bears for four years and polar bear management for U.S. Fish and Wildlife Service for the four years before that. Tony is still busy getting up to speed on the history of bear research on Kodiak, but has plans to look at behavior and time budget analysis in former ecotourism areas this summer. Future plans include investigating population density in the heavily forested portions of the refuge on Afognak Island. Tony will continue the tradition of working closely with the local Alaska Department of Fish and Game biologist, Larry Van Daele.

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## Alaska Bear Festival a Success

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Homer, Alaska was the venue for the Fifth Alaska Bear Festival, 28-29 March 2003, at the local high school's Mariner Theater. The theme for this year's festival "A Look at Bear Viewing" was appropriate given that Homer is considered the bear viewing capital of Alaska (if not the world). Although there are no bear viewing areas within Homer, many guided bear viewing trips to the west side of Cook Inlet (e.g., Katmai National Park, McNeil River State Game Sanctuary) originate here.

The forum part of the event included a review of bear management issues on the Kenai Peninsula and Kodiak Island by Jeff Selinger, Alaska Department of Fish and Game (ADF&G) biologist, and Leslie Kerr, Refuge Manager, Kodiak National Wildlife Refuge. This was followed by a presentation on reading bear behavior by Derek Stonorov, local bear viewing guide. The keynote address by noted wildlife filmmaker, Joel Bennett was titled "New Challenges of Meaningful Bear Viewing." A panel discussion moderated by Colleen Matt, ADF&G and Becky Brock, National Park Service explored questions raised during the recent drafting of the *Best Practices for Bear Viewing*. The forum ended with presentations by local bear viewing guides, which was moderated by Steve Stringham, Bear Viewing Association. Almost 100 members of the public interested in wildlife matters attended at least part of the free forum.

Concurrent with the forum were bear-related exhibits by 18 agencies, conservation organizations and businesses. There was a children's program on bears held at nearby

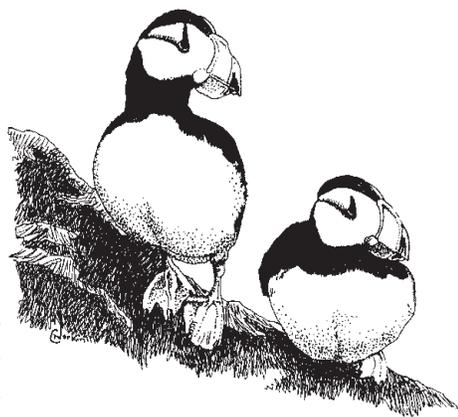
## Alaska Bear Festival, cont'd.

Pratt Museum that was attended by 50 children. There were requests for additional programs for youths.

The forum was bracketed by a film festival featuring award-winning films, and some of Alaska's award-winning filmmakers, such as Joel Bennett of Juneau and Daniel Zatz of Homer. Ticket sales for the film festival partially covered festival expenses. Featured films were *Bears of the World* and *Bears of Alaska*. Short anecdotal stories about bears were given between films. Films selected by the film committee had to be both entertaining and informative about bears. Over 300 people attended the film festival.

Co-sponsors for the Fifth Alaska Bear Festival included 25 agencies, conservation organizations (including the entire spectrum of user groups) and businesses. Each co-sponsor contributed funding and/or in-kind services.

The vision of the co-sponsors of the Alaska Bear Festival is to maintain healthy bear populations throughout Alaska because of their ecological, cultural, recreational and economic values, as well as the pleasure of knowing they exist.



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## North Pacific Rim Brown Bear Management

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In August 2002, bear biologists from the Russian Far East and Hokkaido joined several of their counterparts from Alaska for an intensive workshop on brown bear management in North Pacific regions. The workshop was organized by the Northern Forum, a non-profit, international organization composed of regional governments from 11 northern countries. The Northern Forum brings business, political and scientific leaders together from these areas to address common political, environmental and economic issues.

The meeting began in Anchorage where delegates from Kamchatka, Koryak, Sakhalin, Sakha, Chukotka and Hokkaido met with representatives from Alaska Department of Fish and Game, Audubon, U.S. Fish and Wildlife Service, U.S. National Park Service, and World Wildlife Fund. Agency representatives from both sides of the Pacific gave presentations summarizing their regulatory procedures, management activities, and current issues. IBA president Harry Reynolds presented an informative overview of the role of our organization in international bear research and management, and invited the Russian and Japanese delegates to become active members. The role of non-governmental organizations in bear management and

habitat protection was the subject for the evening sessions. The Northern Forum provided simultaneous translations of all presentations.

On 27 August, 30 members of the group flew to Kodiak Island where they learned about bear research and management activities in that area. Much of the discussion was devoted to bear hunting, and to the recently completed *Kodiak Archipelago Bear Conservation and Management Plan* and the role of the public in working closely with agencies to manage bears and their habitat. There were also presentations on commercial bear guiding, both for hunting and viewing, lead by a guide from Kamchatka and one from Alaska. A field trip to local waste management facilities, a salmon weir, and a hike through bear habitat in Sitka spruce forests at Abercrombie State Park got delegates out of the meeting room on the first day. The second day included a field trip to Karluk Lake and Kodiak National Wildlife Refuge in a flock of DeHavilland Beaver floatplanes. On the final evening of the Kodiak visit, delegates were honored by the people of Kodiak with a banquet complete with singing and dancing by local Russian and Alutiiq Native performers.

The delegation traveled to King Salmon on 29 August, and immediately continued on to Brooks Lodge in Katmai National Park. Bear-human interactions, park and people management, and bear safety training were the primary topics of discussion for the next couple of days. Participants also enjoyed free time to watch bears, enjoy other park resources, and to engage in informal discussions. Cool, rainy weather and infamous Alaska insects had little impact on the enthusiasm and the free interchange during that portion of the journey, and our four translators were in constant demand.

Formal meetings reconvened in Anchorage on 31 August, as the focus of presentations shifted to law enforcement. State and federal agents described their respective programs. There was also a great deal of dialogue about the relationship of Russian and American wildlife laws. These discussions led to development of a list of recommendations to the Northern Forum Board of Governors. Included in those recommendations were: 1) evaluate bear census techniques used in various areas; 2) encourage "fair chase" hunting techniques by foreign hunters in Russia; 3) facilitate improved bear viewing opportunities in Russia; 4) cooperatively develop bear-safety and public education materials; and, 5) improve communication and coordination between biologists and law enforcement agents in Russia and the United States. The dynamic week ended on 1 September with closing remarks, evaluation of the workshop, assignments for publication of the proceedings, and a banquet.

What we did during the workshop was not nearly as important as what we learned. From the Alaska perspective, the meetings were personally and professionally valuable. We learned a great deal from our Russian and Japanese colleagues about the status of their bears and how people interact with them. It was fascinating to discover how similar our natural resources are. We also gained a much greater understanding of the economic and political challenges our counterparts deal with, and the high level of dedication and professionalism they maintain. Discussions about bear management techniques gave us new ideas to incorporate into our programs, and we were encouraged by the prospect of continued cooperation with projects and concepts.

We also recognized how American laws and advertising by American outfitters have tremendous impact on Russian bears.

From the Russian perspective, participants felt they had a magnificent opportunity to get acquainted with and share experiences with their American colleagues on such subjects as population management, the administration of brown bear hunting in Alaska, investigation and prosecution of poachers, and opportunities to share laboratory facilities. However, the greatest impression on the Russian delegation was the way in which American biologists have researched bear behavior and human interactions, and translated this into practical applications in places such as Katmai National Park. On Brooks River we saw interactions between people and bears that are virtually unheard of in Russia. In the Russian Far East, bears frequently use the same areas and resources as people and encounters regularly occur near dwellings or while people gather fish, wild plants and berries. Many of the people that live in these areas have recently arrived from the European part of Russia and they are unaware of the local conditions and do not understand animal behavior. Consequently, in any encounter a wild bear's behavior is perceived as aggressive and the people's reaction is one of fear or defense. We hope to incorporate public education into our management programs for bears and other predators in the Far East so that we can teach people appropriate ways to respond when dealing with them, and ultimately encourage people to conserve these animals and their habitat. This is especially important in areas where economic activities are being actively pursued, such as development of oil and gas fields, construction of highways and

pipelines, and development of agricultural and forest lands. In the face of this economic pressure, it is currently difficult for us to encourage people to preserve wildlife and their habitat, especially large and potentially dangerous animals such as bears.

Our discussions of bear management in Hokkaido and Alaska showed us that our Japanese and American colleagues face similar problems. In Alaska, more than any other region, we saw the positive effects of implementing regulations and education to encourage people to behave properly around bears. It is through these rules of behavior that a peaceful co-existence is possible. We were also very interested in the program of ecological education that is directed at improving people's understanding of the behavior and critical needs of bears. We hope that we can transfer experiences of American colleagues to the Russian regions and make people more comfortable around bears, and ultimately save the lives of many of our bears.

This workshop came at a time of improving relationships between our countries, and at a time of unprecedented pressure on bear populations in the Russian Far East. Natural resource development is rapidly altering bear habitat throughout the region and increased hunting pressure is especially troublesome in Kamchatka. If the momentum generated during these meetings can be maintained and converted to action, these challenges can be met and the fragile bear resources we share can be conserved.

The dedication of the Northern Forum and the agencies that provided funding for the workshop are greatly appreciated. Proceedings and workshop materials are available on the Northern Forum website [www.northernforum.org](http://www.northernforum.org).

## Pacific Coast

Pacific Coast news provided by:  
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Send your news from British Columbia, Oregon, Washington and California to the address above.



## Oregon Bear Hunting

The Oregon legislature is currently considering a bill (House Bill 2436) that would repeal Measure 18, the 1994 voter-passed initiative that banned the use of hounds to hunt bear and cougar, and the use of bait to hunt bear. Although the bill has passed out of committee, it has yet to go to a house vote, faces opposition from many groups and a possible veto by the governor. An attempt in 1996 to repeal the measure via another ballot initiative failed.

## Bear Shepherds in the North Cascades

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The Stehekin Valley, at the heart of Washington's Lake Chelan National Recreation Area, runs 45 kilometers from the head of Lake Chelan into the North Cascade Range. The valley floor ranges from 335 m at the head of the lake to 450 m at the last residence, 14 km up-river. Peaks adjacent to the valley range from 2,200 to 2,500 meters. Access to the valley is limited to small aircraft, boats and hiking trails.

About 100 year-round residents, increased by about another 100 during summer months, live in scattered houses primarily in the lower 8 km of the valley. Most are private landowners living on inholdings; the rest are National Park Service (NPS) employees.

In the springtime, American black bears are drawn to the valley's lush riparian vegetation. Some predation on mule deer fawns has been documented, but is not frequent. Service berries (*Amalanchier* sp.), huckleberries (*Vaccinium* spp.) and kinnick kinnick (*Arctostaphylos* sp.) are abundant later in the season. Ants, also abundant throughout the lower valley, are found in most bear scats in this area. In recent years the number of introduced kokanee salmon has increased dramatically in the Stehekin River watershed, providing food for bears in the lower valley.

Anthropogenic foods are available in a variety of forms, from cooling pies on windowsills, to an apple orchard managed as a National Historic Site. To reduce wildlife attractants, an enclosed community garbage compactor was installed in the 1970s to replace open-pit dumps.

Given the valley's remoteness (a resort hamlet is 30 kilometers away and the nearest town is 80 kilometers down Lake Chelan) and the richness of food availability during most years, most bears in the area are unlikely to encounter any other community.

Bear-human coexistence in the valley has been characterized mainly by mutual tolerance during years of high natural food abundance. During drought years, an increased number of bears looking for alternative food sources have led to lower human tolerance and increased bear mortality.

During 1998, severe drought brought an increased number of bears to the Stehekin Valley in search of food. A classic example was provided by a female bear with two cubs. When the family group was first observed in mid-July, they responded very warily to people. After a few days of foraging in the historic orchard, increasingly near the tourists and NPS staff, the female's wary behavior quickly diminished. Over the next few weeks the family's behavior became progressively more bold and aggressive until they became regular "patrons" at the local bakery. It was here the family group was shot six weeks after they had first been observed, wild and human-wary, running from cars and bicycles on the single-lane valley road. Eight other bears were shot in the lower valley that year, all in an area of approximately one square kilometer. One was destroyed due to problem behavior; the other seven were hunting mortalities on the periphery of the orchard. All of these bears, and a number of problem bears that apparently survived, had become habituated to people at the orchard.

In July 2000, the North Cascades National Park Service Complex (of which the Lake Chelan National

Recreation Area is a part) hosted a program presented by the Wind River Bear Institute (WRBI). The focus of the program was to evaluate the human-bear interface in developed areas throughout the North Cascades parks and to encourage positive change in bear management protocols in northwest Washington.

WRBI Director Carrie Hunt identified the historic apple orchard as the probable behavioral “nursery” for most human-bear conflict in the valley. The setting is ideal for bears’ habituation to people: low numbers of people participating in low-key activities and a laissez-faire treatment of bears. During poor food years, up to a dozen American black bears exploit the apple crop in late summer. The NPS orchardist is present most days. Busloads of visitors arrive at midday for a brief tour of the area, and at other times valley residents or visitors may pick apples. Bears appear to learn habituation first from the solitary orchardist, then quickly graduate to ignoring the tourists who come as much to see bears as the orchard and its homestead.

Fencing the orchard, though it has not been ruled out, has so far not been an option due primarily to cultural-resource concerns. Another concern is that the NPS not remove “cold turkey” from the bear population a traditional food source used for nearly 100 years.

In 2000, Hunt developed a strategy for preventing bears using the orchard from becoming habituated to people. Any bear allowing itself to be observed away from cover would be “shepherded” by yelling and firearm-propelled riot rounds (rubber bullets, bean bags, noise makers). Bears using the far end of the orchard, away from human activity, would be allowed to feed on apples as long as they did not exhibit

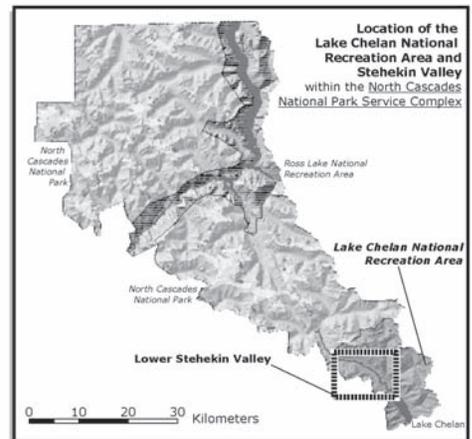
human-habituated behavior by moving away from cover.

The summer of 2002 was our first opportunity to test the strategy, when the valley experienced drought conditions similar to those of 1998. The orchardist reported as many bears using the orchard in 2002 as during the previous drought. But in 2002, she and other NPS staff followed the WRBI strategy, “shepherding” every bear exhibiting habituated behavior in the orchard (as well as in other areas of the valley). Bears moving quickly into cover upon detecting people were left alone.

How effective was this strategy? One season’s activities do not make a study. However, the total known, human-caused mortality for black bears in the Stehekin Valley last year was zero. Further, none of the bears using the orchard were reported in conflict with people elsewhere in the valley (a first, to my knowledge, especially during a drought year), and bears in other locations also responded well to “shepherding” efforts.

Although we did not intend to affect hunting success, no bears were shot by hunters on the periphery of the orchard. It remains to be seen whether this was an artifact of the “shepherding” and/or other factors. It raises the question of whether the historic feature we manage contributes to an artificially high take in the vicinity of the orchard. Almost all of the American black bear hunter-caused mortality in the 25,500 hectare recreation area occurs within 500 m of the orchard. While we do manage for hunting in the valley, we do not manage for *increasing* take over what would occur without this anthropogenic food source.

The program has opened new doors of communication and cooperation between the NPS and



private residents regarding bear-human coexistence in the Stehekin Valley. Hunt and the WRBI have provided new options for old problems. For example, when a “non-orchard” bear visited a family’s chicken coop in mid-summer, the landowner and an NPS ranger worked together to successfully “shepherd” it away over the course of two days, after which it was no longer observed in the area. We continue to seek funding to provide further community-based bear “shepherding” workshops for all residents of the valley.

Challenges to maintaining the program include a recent, high turnover in ranger staff (creating short-term personnel shortages and the need for continued, basic training) and tenuous funds for managing the orchard (i.e., ensuring the dedicated orchardist/bear shepherd is continuously available to work with the bears). To be effective the strategy must remain consistent from year-to-year. Last year’s results suggest the “shepherding” strategy holds promise for future years—and bears.

## Be Bear Aware Campaign

Press release  
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Website [www.BeBearAware.org](http://www.BeBearAware.org).

Bear Trust International (PO Box 4006, Missoula, MT 59806, USA, (406) 523-7779, [www.beartrust.org](http://www.beartrust.org)) and the Center for Wildlife Information are organizing an education program to benefit bears and bear conservation.

Wildlife and land management agencies throughout North America will be recruited to conduct public safety outreach activities, and will be provided with educational materials. The purpose is to educate the public about safe and responsible enjoyment of the outdoors, and help reduce unfortunate human-wildlife encounters.

The campaign is endorsed by the Western Association of Fish and Wildlife Agencies, the International Association of Fish and Wildlife Agencies, the Wildlife Management Institute, The Wildlife Society, USDA Forest Service, etc. The Forest Service and the National Forest Foundation awarded a \$200,000 challenge grant, and the Graphic Art Educational Fund matched \$50,000.

The North American Be Bear Aware and Wildlife Stewardship Campaign was organized because of the escalating number of injuries and deaths to humans and wildlife. The public is poorly informed about avoiding or preventing confrontations with wildlife, and the media often encourage inappropriately close contact with wildlife.

Wildlife agencies joining the campaign will present a consistent, unified voice to the public. Educational materials have been developed and field-tested by state and federal wildlife and land management agencies. Materials include brochures, educational cards and bumper stickers.

## Panel Endorses British Columbia Grizzly Bear Conservation

Press Release, March 7, 2003  
British Columbia (Canada) Ministry  
of Water, Land and Air Protection  
Phone (250) 387-9973  
Website <http://www.gov.bc.ca/>

Victoria—An independent scientific panel appointed on recommendations from the International Association for Bear Research and Management has confirmed that the British Columbia (B.C.) government is managing grizzly bears effectively and using sound population estimates.

“We made a New Era commitment to replace the previous government’s blanket moratorium with regional moratoriums on grizzly bear hunting,” said Water, Land and Air Protection Minister Joyce Murray. “I’m pleased that the scientific panel’s report concludes that the harvest of grizzly bears in B.C. can be managed on a sustainable basis, with minimal risk of population declines.

“The report indicates that we are on the right track and that our population estimate of at least 13,800 bears is far more accurate than those suggested by some advocacy groups.”

The report strongly refutes population estimates of 6,000 or fewer bears, calling them “unreliable” and “biologically unrealistic.” The panel concluded that current protective measures, combined with some additional recommended measures, offer a “robust conservation strategy for grizzly bears.”

“We base our estimates on sound scientific methods, but there is

always room for improvement,” said Murray. “We are acting immediately on many of the panel’s recommendations and will revise our long-term conservation strategy to ensure that healthy grizzly populations are sustained in the future.”

As recommended by the panel, the province will reduce the maximum allowable human-caused grizzly mortality rate to five percent from six percent in time for the spring 2004 hunting season. The province will also revise administrative unit boundaries and conduct additional research to track population trends.

The province will update the grizzly bear conservation strategy to address the panel’s recommendations for dealing with habitat issues, maintaining grizzly populations and establishing grizzly management areas. A public advisory committee made up of First Nations, hunters, guide outfitters, industry, conservationists, outdoor recreation users, naturalists and representatives of local and federal governments will provide input into the strategy.

“We are pleased that the province has accepted our recommendations to further improve a bear harvest management system that is arguably already one of the best in North America,” said James Peek, chair of the grizzly bear scientific panel.

For a copy of the panel’s final report, go to <http://wlapwww.gov.bc.ca/wld/> and click on Grizzly Bear Conservation Strategy.

## Southeast USA

Southeast USA news provided by:  
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Send your news from the southeastern USA to the address above.

## Louisiana Black Bear Restoration

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The Louisiana black bear (*Ursus americanus luteolus*) was once distributed throughout the lower Mississippi Alluvial Valley in eastern Texas, Louisiana and southern Mississippi. As a result of excessive harvest, and habitat loss and degradation, the subspecies is currently restricted to the Tensas River basin and Atchafalaya River basin of Louisiana, with additional individuals located in the lower East Pearl River basin in Louisiana and the lower Pascagoula River basin of southern Mississippi. The subspecies was listed as federally threatened by the United States Fish and Wildlife Service (USFWS) in 1992.

After over a decade of research, the USFWS and the Black Bear Conservation Committee developed a Black Bear Restoration Plan and Recovery Plan, with the ultimate goal of delisting the Louisiana black bear. To accomplish this, a population must

be established between the existing Tensas River basin and Atchafalaya River basin populations in order to facilitate movement of bears between these areas. A five-year research/restoration program was initiated with the goal of establishing a sustainable black bear population in the Red River Complex (Complex) of east central Louisiana, in order to facilitate movement of bears between the existing Tensas and Atchafalaya River Basin populations. The USFWS, in cooperation with Louisiana State University (LSU) and the Louisiana Department of Wildlife and Fisheries, is currently in the beginning phases of this program, with five females being released in the Complex in 2001-2002. Two of those females have remained collared and in the area, and are currently being monitored.

Trapping efforts on Tensas River National Wildlife Refuge and surrounding private lands (owned by Deltic Timber and Anderson-Tulley Timber companies) by USFWS and United States Department of Agriculture personnel in the spring, and by LSU personnel in the summer and fall of 2002, resulted in 91 captures of 80 individual bears. Thirty-five females were collared and tracked by LSU graduate student John Benson throughout the summer and fall. Beginning in February 2003, all collared females were located and reproductive status assessed. Eleven had cubs and six were chosen for "soft release" at Lake Ophelia National Wildlife Refuge (LONWR) in the Complex. In March, two females were taken from ground dens and three females were successfully moved from tree dens for a total of five females and 15 cubs released in the target area. To date, four of those females have remained close to the release sites, while one has moved approximately 28.5 km

west of LONWR. Females in the Complex and in the Tensas River basin are being monitored daily in order to compare post-released movements with natural movements in these areas. Additional trapping by LSU personnel will resume this summer to increase the number of marked females for future relocation efforts.

## Florida Update

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The Florida Fish and Wildlife Conservation Commission (FWC) is involved with a number of research efforts regarding American black bears. Following are some current research projects.

## Bald Bears?

FWC wildlife veterinarian, Mark Cunningham, continues to examine demodicosis in the Ocala black bear population. A small pocket of bears on the western edge of the Ocala National Forest suffers from generalized demodectic mange. Research into the character and cause of this disease has been conducted in cooperation with other research projects in Ocala National Forest since 1999.

Demodectic mange is caused by a host-specific mite that has been identified as a unique species, *Demodex ursi*. Since the disease was first identified in the state by Forrester et al. (Forrester, D. J., M. G.

## Florida, cont'd.

Spalding, and J. B. Wooding. 1993. Demodicosis in black bears (*Ursus americanus*) from Florida. *Journal of Wildlife Diseases* 29:136-138., approximately 45 cases have been diagnosed in Florida. Outside of Florida the disease has been diagnosed only once—this in one of 113 bears examined in Wisconsin by Manville (Manville, A. M. 1978. Ecto- and endoparasites of the black bear in northern Wisconsin. *Journal of Wildlife Diseases* 14:97-101.). Normally, *Demodex* spp. mites live in very low numbers on most individuals of most mammal species as part of their normal skin fauna. However, in domestic dogs, an unknown underlying immunosuppression results in over-proliferation of the mites and the skin disease demodicosis. The cause of the disease in bears is unknown.

Clinical signs in bears are primarily limited to hair loss—which is most consistently on the muzzle and around the eyes but may progress to affect virtually the entire body. The mites appear to be passed from mother to cubs and hair loss begins around five months of age but has been documented on some neonate cubs. It appears that males usually go on to recover while most females have the disease for life. The prevalence of demodicosis among females in the study area is over 80%. Contrary to many media reports, the occurrence is very localized and restricted to a very small geographic area. Researchers continue to unravel the epidemiology.

### State Research

The final field season for a three-year study, "Statewide Assessment of Road Impacts on Bears in Florida," will end this fall. This

study is using hair snares and DNA to assess the impacts of transportation-related deaths on bear populations by estimating the abundance and distribution of black bears in six core areas across the state. The results will enable FWC and Florida Department of Transportation to make informed decisions regarding highway management issues such as design, placement and mitigation. FWC has initiated a similar effort in the North St. Johns River area. The "Northern St. Johns River Black Bear Assessment" began October 2002 and is a study to document bear presence in an area of the St. Johns population that has a patchy distribution.

Another new study, "Non-invasive Assessment of Black Bear Movements and Abundance Relative to U.S. 98 Within the Aucilla Wildlife Management Area (WMA)" will begin this summer. This is a smaller version of the "Black Bear Movements and Habitat Use Relative to Roads in Ocala National Forest" study, designed specifically to examine a section of U.S. 98 that bisects the Aucilla WMA. This area is ranked third in importance out of 15 statewide roadkill problem areas.

The study of "Black Bear Movements and Habitat Use Relative to Roads in Ocala National Forest" is in its fourth and final year. Researchers with the FWC are investigating the movements, habitat use and population dynamics of black bears along a portion of State Road 40 in Ocala National Forest. The Ocala black bear population is the largest in the state and has sustained 45% of the statewide roadkill since 1976. FWC is seeking to define habitat use, patterns of movement and rates and sources of adult mortality from radio-collared bears. Data concerning the locations and patterns of highway crossings are being gathered

from a dirt track transect adjacent to the roadway and by documenting the locations of unsuccessful road crossings. The distribution and abundance of fall foods is also being assessed by mast surveys to help explain bear movements and highway crossing frequency. This project has spawned several graduate research projects through the University of Florida under the advisement of Dr. Madan Oli.

### Graduate Research

Melissa Moyer is investigating the habitat use and genetic relatedness of female black bears in the Ocala National Forest by intensively monitoring collared bears, and to address how range overlap and space sharing between bears correlates to their genetic relatedness. Additionally, she will identify important habitats, including seasonal and annual changes for bears.

Jeremy Dixon is examining genetic structure and gene flow among Florida black bear populations to document gene flow among the six core populations, investigate gene flow in terms of landscape configuration, and to evaluate the effectiveness of a regional corridor in connecting the Ocala and Osceola black bear populations. These data are closely tied with those collected during the statewide assessment study discussed above.

Elina Garrison is examining specific causes of cub mortality and denning ecology of Florida black bears in North Central Florida by intensively monitoring radio-collared cubs. Information on reproductive ecology of female black bears such as litter size and age at reproduction is also being collected.

## SABBSG Plans Regional DNA Sampling

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State and federal wildlife agencies in Georgia, North Carolina, South Carolina and Tennessee formed the Southern Appalachian Black Bear Study Group (SABBSG) in the mid-1970s. Since its formation, the SABBSG has worked to share American black bear data and develop consistent bear-related surveys. Participating agencies meet biannually to discuss bait-station surveys, mast surveys, nuisance activities, changing legislation and research needs. Because the participants manage a shared bear population across four states, the group has identified a need for an accurate regional population estimate and the ability to track trends in the bear

population over time. A regional population estimate would be important to guide management and to evaluate the validity of the bait-station index.

Conventional mark-recapture techniques suitable for small study areas are not practical for a large region like the southern Appalachians. Advances in DNA technology may offer the SABBSG an alternative method for population estimation. The SABBSG is conducting a pilot study this summer to determine whether genetic sampling for population estimation is feasible and to develop appropriate sampling regimes to obtain desired levels of precision. One high density study area will be located in the northwestern quadrant of the Great Smoky Mountains National Park. A lower density area will be located on National Forest lands along the borders of Georgia, North Carolina and South Carolina.

Specific objectives of the study are:

1. determine the feasibility of acquiring sufficient DNA samples,
2. determine expected capture and recapture probabilities,
3. determine optimal length of the sampling period,
4. evaluate the effects of sampling biases, and
5. provide baseline abundance and density estimates for black bears in selected areas of the southern Appalachian region.

Agencies providing funding, staff or support include the Georgia Department of Natural Resources, National Park Service, North Carolina Wildlife Resources Commission, South Carolina Department of Natural Resources, Tennessee Wildlife Resources Agency, U.S. Forest Service, and the USGS Southern Appalachian Field Lab at the University of Tennessee. Field work will be conducted from May to August, and results will appear in this newsletter.

## Seventeenth Eastern Black Bear Workshop Summary

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The 17th Eastern Black Bear Workshop theme was "Black Bears in the Back Yard." Since calls received by state agencies concerning American black bears close to residential areas are steadily increasing, many are concerned with ways of mitigating this behavior. Talks ranged from training police officers to be first responders to bear calls and complaints to using trained dogs as a tool

to condition black bears. Road construction impacts and home range size for black bears in urban states were also topics of great interest.

By far the biggest attraction was the use of the black mouth yellow ker dogs used in Louisiana to deter nuisance black bears. Paul and Maria Davidson were quick to point out that the dogs were not a cure-all for black bear nuisance abatement but a tool to be utilized in certain situations. They explained that the dogs' role as ambassadors to local communities was as important as the bear conditioning work they did. They felt that people were more interested

in what they do when they realized a dog was involved. This leads to better communication between state officials and local residents of bear country.

Dr. Mark Frakker spoke about his immunocontraception work and what the future holds for immunocontraception in wildlife management. Since this is such a hot topic here in New Jersey much attention was paid to his presentation by the local media.

Of the five break-out sessions, the use of DNA for population assessment and the training of police officers for bear response drew the most attention. Thomas Eason of the

## Eastern Black Bear Workshop, cont'd.

Florida Fish and Game Commission lead the DNA session and discussed the parameters when considering the use of DNA sampling techniques. Patrick Carr led the discussion on training police officers in local communities to deal with bears. Topics included the cost of aversively conditioning black bears by local communities as opposed to state agencies, and training officers in the biology and conditioning of bears.

Blair Soars of Pneu Dart Inc. donated a \$700 prototype dart gun. Thomas Eason of the Florida Fish and Wildlife Commission won the drawing for the gun.

Tyler Plumb of V Quip and Tom Vail of McClintock Metals donated residential bear proof garbage containers to the New Jersey Division of Fish and Wildlife. The dumpsters will be given away to two communities. We are considering having school groups develop ways of bear proofing their schools. The two schools that develop the best methods will win the dumpsters for their school or community.

Other contributors to the workshop were: Owls Nest Sports Shop, County Line Sports Shop/Hart's American, Jim's Sports Center, Digestive Care, Maglio Electric, Wild Turkey Federation State Chapter, Star Ledger, Ray's Sport Shop, Reed Joseph, Walmart, Gary Grey Trucking, Rutgers University Cook College, Stoudt Canvas Supply, D and N Animal Recovery, Loupold Optics, New York Metropolitan Outdoor Press Assoc., Stokes Sport Shop, Tom Broadhecker, and ESU Fish and Wildlife Micro Bio Lab.

We would like to thank the Black Bear Conservation Committee, the North American Bear Foundation, Bear Trust International and the many other financial contributors that made the 17th Eastern Black Bear Workshop such a great success.

## Rehabilitation and Release of Two Black Bears, Alberta, Canada

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Released, rehabilitated bears can be a danger to the public (van Dijk and Huber 2002). However, releases of American black bears are rarely documented. Stringham et al (2003) argued that research to develop effective rehabilitation and release methods should be encouraged. Released bears should not be a risk to people, should have skills to survive in the wild, should be monitored post-release, and their progress documented in order to develop guidelines and protocols for bear rehabilitation.

In Alberta, orphaned bears sometimes attract the public's attention and they demand that the fish and wildlife department intervene. Nature is prevented from "taking its course" and the bear cub(s) are collected and placed in the care of a wildlife rehabilitator. No funding is provided by the Alberta provincial government to the rehabilitator who cares for the bears until their release. It is the responsibility of the wildlife rehabilitator to find funding and to monitor rehabilitated bears post-release. This aim is not always achieved.

In spring 1999, two female, sibling, American black bear cubs were brought to the Cochrane Ecological Institute (CEI). The public had reported the cubs over a period of eight days. Fish and wildlife officers found them close to the body of their mother near a road outside Edson, Alberta. The cubs were dehydrated and required a short period of observation and care. They were gradually habituated to a wooded, 2.5-acre enclosure where

they lived until their release. See Smeeton and Waters (in press) for information on the bears' captive conditions.

The bears were approximately 2.5 years old when they were released. The release delay was caused by a lack of funding for post-release monitoring. The release occurred in early July 2001.

The bears were not returned to their original site due to the nearby presence of camping sites. The Weldwood Managed Forest was chosen as it had areas of relatively low levels of human disturbance. Both black and grizzly bears occurred throughout the forest.

Prior to release both females were tattooed, weighed, fitted with an ear tag radio transmitter, and had blood samples taken. Both females were in very good health and body condition compared to wild bears (T. Shury, pers. comm.). Bear A weighed 180 pounds and her smaller sibling, Bear B, weighed 156 pounds. In the spring prior to their release, the bears had shown very little interest in the food provided by CEI staff and, in contrast to the previous year, preferred to forage on leaf buds and grass available in their enclosure. Problems with their foraging skills were not foreseen after release, but the establishment of a home range leading to potentially aggressive interactions with already established bears was a possibility. The bears were released together using a hard release method, with no acclimation period.

At the site, the bears were checked and released. Both bears slowly left the trap and disappeared into the bush. We immediately left the area and returned the next morning to locate the bears by radio telemetry.

We followed the bears using radio telemetry for six consecutive days.

We saw the bears either separately or together three times. Once the bears came out of the bush, began play fighting about 300 meters away from our vehicle, and were visible for about 30 seconds.

On the sixth day, only one signal was heard. Eventually Bear B was located visually about two miles west of Bear A's estimated location. Radio telemetry revealed that the bears had separated. Neither bear moved extensively from the original release site. Bear A's area included the release site. Bear B's area was adjacent to the release site where she was first observed on her own. In August, fresh scat composed predominantly of berry seeds was found in the area frequented by Bear B and evidence of digging for invertebrates was seen. The last sighting of Bear B was 9 September 2001 on a creek bank in the area where her signal was often heard. Bear A's signal was heard near the original release site on the same day.

The last trip to the area in 2001 occurred in mid-October, about a week after the last reported black bear sighting for the year (D. Palkun, pers.comm.). No signals were located for either bear, leading to the belief that both bears had hibernated. The ear tag transmitters were due to reactivate on 1 April 2002, and we planned three trips to the area from mid-May to mid-July. No signals were located from either bear despite extensive searches in 2002. We have no information about the possible fates of the bears.

The captive facility that housed the bears enabled them to learn foraging and climbing skills. The release site was isolated from human activity. Resident bears in the release area did not seem to affect the ability of either bear to establish a home range almost immediately after

release. The healthy body condition of the bears may have provided an advantage over other females.

It would be extremely difficult to find suitable black bear habitat in central Alberta that does not have resident black bears and/or human development. Although the fate of the bears was unknown after September 2001, the bears were foraging successfully and appeared to have established a home range. Most importantly, fish and wildlife officers received no nuisance bear complaints from the area (D. Palkun, pers. comm.). The project also raised awareness in Alberta about bear conservation. More research needs to be done on a much larger sample of such bears before any conclusions can be drawn about the practicalities of rehabilitating American black bears.

#### Acknowledgements

I am extremely grateful to the World Society for the Protection of Animals (WSPA Canada) and Canadian Pacific for their support for this project, particularly, Rob Laidlaw and Pat Tohill of WSPA and Dennis Apedale of Canadian Pacific. I am also very grateful to the officers of Alberta Environment's Fish and Wildlife Department especially Dennis Palkun of Edson. Rick Bonar of Weldwood Managed Forest was helpful throughout. I sincerely thank volunteer field assistants: Patricia Mistero, Ben McLeod, Leanna Davies,

Nada Beainy, Daniel Woods, Beth Doman, Tyler Kristiansen and Jill Westhorp. The Elsa Foundation and The International Wildlife Coalition support the captive facility where the bears were kept. Many thanks to Safeways Supermarket in Cochrane for providing invaluable support to the bears at CEI. Finally my thanks to Clio Smeeton, President of CEI, who made this project possible by rehabilitating the bears and being the backbone of the project throughout.

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## Brown Bear Rehabilitation at Toropetsky Biological Station

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Toropetsky Biological Station "Clean Forest" was established in 1985. The primary goals are: eco-monitoring of 100 square kilometers; providing the Central Forest Biosphere Nature Reserve publication *Nature Annals* with annual ecological reports; and studying brown bear biology. Since 1990 rehabilitation of orphaned bear cubs has been conducted. Initially, the station purchased orphan bear cubs from hunters. Gradually, the Biological Station became well known as an orphan bear cub rehabilitation center. Hunters now donate bear cubs but the Biological Station can't afford to house more than 15 animals at a time, which is incomparably lower than the number of bear cubs offered.

By 2002, 100 bear cubs nurtured at the Biological Station had been released into the wild; 74% of them have adjusted to the wild (including bear cubs from the Kazany Zoological and Botanic Gardens (n-6, Kazany town) and the Belgorod Zoo (n-4)).

Bear cubs arrive at the rehabilitation center aged 0 to 3.5 months old and are released to nature at the ages of seven-to-eight and 16 months. Half-day-old bear cubs weigh 432 to 468 grams (451 grams average (n-5)); 35-to-45-day-olds weigh 1000 to 1800 grams; seven-month-olds weigh 12 to 16 kilos; 16-month-olds (after wintering) weigh 17 to 25 kilos (over wintering cubs can lose up to 30% of their weight).

Of bear cubs brought to the station: 67% came from hunters; 24% were orphaned for other reasons; and 9% came from zoos. Sixteen percent died from natural causes (killed by male bears, stray dogs, wolves and poison plants); and 5% died from diseases or injuries (n-107). Health problems encountered at the Biological Station included respiratory diseases (cubs under three months old) and sores from wounds. All were cured if antibiotics were used.

During 2002, 18 orphan bear cubs were kept at the station, see Table 1. All the bear cubs delivered to the Biological Station by hunters were from 2 weeks to 2.5 months old. Up to three months of age they were kept in a warm building, in separate boxes (one, two or three animals in each box). At the age of three months, they were separated into two groups (7 and 11 cubs) and put into an enclosure in the forest. After four months, they were given free access to nature by

removing part of the enclosure fence. During this period the groups did not mix, being absolutely independent "families" with their particular "family scent." They moved freely around the 600 hectare site and adjusted to being wild. Extra nutrition (corn, sunflower seeds, etc.) was provided next to the enclosure, which attracted bear cubs and made it possible to catch them when necessary.

It is not easy to catch a bear cub. We trap it in a small enclosure (30x30 meters), immobilize it, check it, weigh it, and mark the ear with the address of the Biological Station. Then we place it in a transport cage and take it into nature a distance of 70 to 600 kilometers from the station. Sometimes in July bear cubs leave the area where they have been kept, for at the age of six months they tend to become independent and can successfully survive in the wild. By this time they have enough food (berries, insects, mice, etc.) and do not need extra

**Table 1. Toropetsky Biological Station 2002 Bear Cubs Rehabilitated**

Date Received	Bears	Gender		Days Old	Place of Origin
		# Female	# Male		
3.02	2	1	1	30-35	St. Petersburg
5.02	3	2	1	30-35	Okhvat, Penovsky region*
13.02	3		3	40-45	Moscow
18.02	2	1	1	60-65	Andreapolsky region*
22.02	2	1	1	40-45	Karelia
25.02	2		2	60-65	Toropetsky region*
6.03	3	1	2	60-65	Novgorodskaya oblast
25.03	1		1	90-95	Omsk town

\* Tverskaya oblast

**Table 2. Toropetsky Biological Station 2002 Rehabilitated Bear Cubs Successfully Released to Nature**

Release Date	Bears	Gender		Days Old	Release Location
		# Female	# Male		
26.07	2		2	210-240	Novgorodskaya oblast
28.07	2	1	1	210-240	Toropetsky region*
29.07	3	1	2	210-240	Toropetsky region*
4.08	2	1	1	210-240	Andreapolsky region*
4.10	1	1		300-310	Andreapolsky region*
8.10	2	1	1	300-310	Kesovogorsky region

\*Tverskaya oblast

nutrition. They avoid people and it is extremely difficult to catch them. Such bear cubs were recorded two or three years after they had left the Biological Station at a distance of 10 to 150 kilometers, and one was 215 kilometers away.

In 2002, 17 of 18 bear cubs were released to nature during July to October (see Table 2 on page 22). Five bears returned to towns and villages 10 to 42 days after they had been released. We took them back to the Biological Station and together with the remaining cub which was not released in the wild, overwintered them.

Twelve (67%) of the original 18 bear cubs, released into nature at the age of about seven months old, adjusted to wild life successfully. Three were equipped with transmitters and were monitored in the wild until the end of November.

The six remaining bear cubs (one with a transmitter) from the original group of 18 spent the winter in human-made dens (boxes of planks set in the forest). After overwintering in the natural environment without extraneous noises and scents (even in a human-made den), bear cubs become wild and adjust easily to nature. This method of overwintering bear cubs has been used successfully at the Biological Station since 1995.

During June and July there was road construction within two kilometers of the Biological Station. The workers used heavy machinery and threw out rubbish and food. Bear cubs became used to the machinery noise and human activity. Ten days after being released (120 kilometers from the Biological Station), two bear cubs were attracted by the noise of a tractor (two kilometers from the release site). They were caught and delivered back to the Biological

Station as "problem animals" for overwintering at the station.

After 23 days, three more bear cubs approached a small village (15 kilometers from the Biological Station) where holidaymakers were staying. Even though people saw the special marks on the bear cubs' ears and knew the rules about orphan bear cubs, they ignored the rules, fed them, and tried to attract them for picture taking. However, the animals were careful and two days later left the village. After 13 days they were noticed again around the village but did not approach people. Later they were registered at 12 to 21 kilometers from the village. Their behavior did not differ from the behavior of wild bear cubs starting their independent life.

Forty-two days after release, three other bear cubs approached a settlement and followed women gathering berries in the forest. They were caught and delivered back to the Biological Station as "problem animals."

Thirty days after release, one of two bear cubs with transmitters approached a logging operation field kitchen, and fed on wastes. It was caught and delivered back to the Biological Station. The other one was registered regularly through autumn near its release site.

The rehabilitation of orphan bear cubs at the Biological Station "Clean Forest" starts with raising them (including special feeding) in a warm room up to the age of three months. Then bear cubs are placed in the forest enclosure far from people (400 meters from the closest house), where they can shelter in a small den-like wooden house. There they are fed first with liquid, then with hard food. There is also a natural reservoir in the enclosure. At four months of age they have free access to the natural environment and are not accompanied by staff. Five-month-old bear cubs use a

territory of about 300 to 400 hectares. At the age of six months they may walk two-to-four kilometers from the enclosure. They are active during daytime, particularly in the morning and in the evening.

Staff who feed bear cubs and maintain contact with them (the same one-to-three people) use the same clothes and use no perfumes except those from basic toiletries (soap, toothpaste, etc.). Extra nutrition is divided into small portions and spread on 100 to 150 square meters near or within the enclosure. The number of portions exceeds the number of bear cubs, which helps to avoid conflicts among animals.

Some bear cubs leave the Biological Station voluntarily. This is called a soft release. Such animals acquire a strong fear of people and all signs of human presence.

The main method of release is a semi-hard one, in which bear cubs are released after they learn how to find food, acquire a sense of locality and form defensive behavior patterns. The difference is that they are released into a new, unfamiliar environment. We do not use a hard method of release, although consider it a potential method to be tested in the future, in cases where it is the only possible way of release.

Biological Station staff conduct public education locally focusing on young people, promoting care of nature and positive human attitudes towards animals. They also work with local authorities and mass media to ban bear hunting during winter. Recently we have achieved significant progress and winter bear den hunting in central Russia has been banned for 2003.

The orphan bear cub rehabilitation project at the Biological Station "Clean Forest" is financed by the International Fund for Animal Welfare.

## Drinking From a Different Well, Funding Your Project

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When I initiated the Mexican Black Bear Project, I was pretty green. I didn't have a school, and I had no prospects of funding. All I knew was that I wanted to study bears in Mexico. As I hear you chatting on Truman, I see many similarities to the challenges I faced. Many of you have very big hearts, great ideas and supernatural energy to devote to your projects. I understand your frustrations in wanting to do so much, but feeling you've been able to do so little. Let me encourage you: I just finished 10 years of research, and I turned in my dissertation 18 April 2003. The total funding raised was half a million dollars. I'm pretty satisfied, and I know that part of my role as Student Coordinator is to help encourage you. Here are some ideas and tips that will help you, listed in the order of their importance.

### 1. Have a Plan

Nobody will take you seriously if you do not have a plan, but if you DO have a plan, that will be your "foot in the door." When I first started, I had just graduated from college, and had relatively little experience planning a research project. I sought the advice of those who had, and they helped me develop a reasonable plan. Common sense was essential in designing a project that was doable. When people saw that I was organized and determined, they looked at my proposal.

### 2. Be Determined

For every 100 people, 97 people will tell you that it can't be done, two will try to make you fail, but *one* will tell you that it *can* be done and will go out of their way to help you. Stayed glued to that *one*. Out of the hundreds of people that I talked to when I started my project, I acquired a small, but

### Truman—Student List Serve

- For IBA students only (some exceptions will be made).
- Discussions pertaining to bear biology, management or study design challenges.
- Job searches, announcements, information regarding the IBA and student membership.

#### Instructions

- Contact Diana Doan-Crider at d-crider@tamuk.edu to enroll.
- Go to <http://aristotle.tamuk.edu>.
- Click on Agricultural Lists.
- Click on Truman.
- Enter your email address and the password: Bears01.
- Go to Create Message.

Do NOT reply to list serve messages using your "reply" button. You must return to Truman and respond within the list serve or else other members will not receive your response.

### Truman Lives!

We've had a great response on Truman, our new IBA Student List Serve, from students across the world, including South America, Scandinavia, France, Germany, USA, Canada, Asia and Turkey! Please direct bear students to Truman, so we can help them, too.

Many of you have demonstrated a real hunger for knowledge. Rich Harris and the IBA Council are working very hard to make *Ursus* readily accessible. Your IBA membership now includes *International Bear News* and *Ursus*. The annual fee of US\$50 is very reasonable for what you are getting, and much needed by the IBA to cover their publication costs. If you are truly in a financial bind, the IBA will accept US\$25 and still send you the journal and newsletter (see page 33). Many of you don't have access to past publications—mainly South Americans and Asians—but we're working on that.

One idea is to develop a student publication series covering the fundamentals about bear research and management that you can access through the list serve. Based on what you have requested through Truman, the next series of newsletter student columns will focus on animal safety and handling, habitat analysis, population dynamics assessments, etc.

We're planning for the 2004 San Diego IBA conference (see page 30) including an evening brainstorming session where students can present five minute summaries of their projects. Challenges, problems and successes will be the focus with professional members of the IBA on hand to help out. Stay tuned to Truman so you can be part of the action.

wonderful group of “counselors” that helped and encouraged me. Those people were critical to the project’s success, because nothing will limit success more than discouragement. And believe me, there are some real discouragement champions out there. Avoid them at *all* costs.

### 3. Network

When you are thirsty, you go where there’s water. While biologists have a tendency to be introverts (that’s why we like animals), the fact is that money is a people thing. People have a fear of getting out of their comfort zone, so they drink water at the same trough all the time. The IBA grants program can support only a few projects. You’ve got to step out of the box and be willing to go find some new sources, and that may mean getting out of your comfort zone.

When I first started the project, I bought myself a three-piece business suit (now *that’s* brave), scraped up enough money for a plane ticket to Washington, D.C. Why? Because I knew that was where the action was. I was scared to death. I slept on a friend’s floor, and rode the subway into town every day for five days. I made appointments to see everyone, from private NGOs to federal agencies. The CIA escorted me out of an office building because I blundered into a basement room labeled “Joint Chiefs of Staff.” One congressional representative overheard me say “black bears” to his secretary, and we spent two hours looking at pictures of his mountain lion hunting trip. Before it was over, I had appointments with several companies and agencies, and walked away from Washington with \$60,000 and a new pickup truck. One donor told me they were giving me \$25,000 because I had the *nerve* to show up. Do what you have to do, and get out there and meet some people.

### 4. Attach Yourself

Some of you are carrying a very heavy load on your own. You may be independent types, but most funding agencies or organizations are hesitant to donate to small unproven groups. I cannot really blame them, because I would probably do the same. I recommend that you attach yourself to some trustworthy organization or academic institution that can provide a roof over your head, and help you manage your funds. I attached myself to the institute and university where I now work. I brought my own funding, but they provided me with a very strong infrastructure and support network for my project. If you don’t attach yourself, you may have to work extra hard at proving that you can be trusted with other people’s money.

### 5. Be Creative

In the desert, animals have to be creative to get water. I once saw a bighorn sheep break open a barrel cactus to drink the juicy mush inside. As the typical government or NGO funding sources run dry, some of us simply shut down our projects. Worse, some of us keep trying to do bear research on \$5 a day, which only produces really bad results and gives you a nervous breakdown. What I found was an amazingly high interest from the private sector, including companies looking for pro-environment projects. I also found an amazingly low number of biologists responding to this phenomenon. Is there a bread company in your country that has a teddy bear logo? Ask them if they want to sponsor your bear research. A shoe polish company named “Oso” (“bear”) gave me \$5,000 to buy a 4-wheeler. Are there wealthy individuals who might like to see a bear and help out with your field work? Ask them to fund your project. One lovely lady came to

visit my study site, and when I caught a bear and named it after her, she gave me \$40,000. Do not compromise your ethics, but be open to new funding sources.

### 6. Be Professional

Dress and act like you’re a professional, even if you don’t *feel* like one. The first impression you make may be your only opportunity to present your project. Make sure your proposal is high quality, and proofread for spelling and grammar. Be polite, schedule appointments and show up on time. Include nice photos in your proposal if you are addressing the private sector; they are not as rigid about protocol as agencies or academic institutions. Follow up with a phone call or nice letter, walking the fine line between being assertive and pesky.

### 7. Cultivate Your Relationships

Once you establish relationships with your supporters, cultivate those relationships like a garden of gold. Many of my supporters continued their funding because they enjoyed working with the project. My favorite supporter began chatting with me at a folk concert. By the end of the evening, the donor asked me to submit a proposal to his private foundation. I did. They gave me \$50,000 the first year, and continued for the next four years as well.

### 8. Demonstrate Integrity

Finally, it is vitally important to maintain integrity in your work. Publish yearly reports, and demonstrate that you are on schedule and producing results. Spend project money wisely because it is not your money. You are facilitating other people’s dreams, so use prudence and more money will follow. Your reputation, whether bad or good, will follow you around like an odor. Make sure it’s roses they smell, and not a skunk.

Best wishes!

## Hopi and Bears

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### A Hopi Story

People were living at Wupatki. There were enough people to permit gambling. Gambling was played at night, after the work was finished. Initially the people played for bundles of broom straws. The losers had to cook breakfast for the winners the next day. Eventually though the people began to gamble real possessions and some became so addicted that they didn't go to bed at night. A young man was one of these. He lost his mother's deerskin dress and his father's ceremonial kilt and embroidered sash. This was a serious infraction. These items were precious and should have been bequeathed to their children. So the boy was banished.

He wandered until he came to the San Francisco Peaks. One night, in the middle of the forest, he lay down to sleep when he heard the sounds of something moving toward him. Suddenly he saw a bear rear up on its hind legs. He was about to run away when the bear addressed him. "Don't run away. I won't harm you." The bear led him back to its home. He entered first and when the bear jumped down the ladder into the house it had its paw up to its face, looking through the claws. The bear introduced him to her family: mountain lion, badger and gopher. One by one they each went into the back room and returned as humans. The bear became a beautiful woman. That night they decided to have a dance to entertain the boy so they departed. They returned as Kachinas, entering down the ladder and danced the night through. Time passed. Eventually

the boy married the bear-woman and they had two children.

After several years he missed his human family so he left his animal family to go back to his human family where he stayed for many years. The bear-woman and her children came back to find him. To attract his attention they ate some of the corn in his fields. After several nights of losses he gathered a group of young men to help him find the culprits. He left earlier than his companions and found the bears. He drew his bow to shoot when the mother bear attacked and killed him and returned to her home. The young man's companions found him and buried him.

The bear-woman's family retrieved his body and took it back to their home in the San Francisco Peaks where they placed it in the house and chanted and prayed all night. The next morning he was alive. It was the work of the badger and the mountain lion that revived the young man. For the next four days he took on the shape of a bear while badger taught him the skills and ritual of curing. When he had learned all badger taught him he returned, with his bear-wife and children, to the home of his human family where they settled in a home near his parents and sister.

And so, from that day on, the man took care of all the people there at Wupatki and he worked for the people there. His reputation spread and he worked hard to heal people in the surrounding country. From that time on he fulfilled his ceremonial obligations toward the animal people and placed pahoes at the edge of his field. In this way he took care of the animal people too, and in a way he was paying them back for their gift to him.

And here the story ends.

### Hopi Land

Black Mesa is the center of the universe to the Hopi of northeast Arizona. It is a large plateau that rises seven thousand feet from the Painted Desert. This is the place that Masaw (guardian spirit of the Fourth World) told the Hopis to go to after the clans had completed their migrations at the start of the Fourth World. It is more a land of shrines and holy places than it is of roads and shopping centers. For the Hopi, land tenure is largely religious. Their land was promised to them at their emergence into the Fourth World, claimed by them after their migrations, and defined on their sacred tablets—it extends from the Colorado River to the Rio Grande River and from the forested mountains to the north to the deserts of the south. The land the Hopi settled is a hard but beautiful one.

### Kachinas

To the southwest of the Hopi homeland are the San Francisco Mountains dominated by San Francisco Peak. This is one home of the Kachinas ("respected spirits:" spirits of the dead, of mineral, plant, bird, animal, and human entities as well as of clouds, planets, and stars). From December through July, Kachinas reside on earth and inhabit the San Francisco Mountains where they prepare rain and snow and appear as clouds above the peaks. They bring gifts for children and rain for crops. In the past they came in person and taught the Hopi their songs and dances. Now the Kachinas come in spirit only. The masked men who impersonate them become Kachinas. American black and brown bears were once found in the San Francisco Peaks, and, today, black bears are still there. Bear Kachinas are members of the Bear Clan. Either black or white, they carry bear paws, and have a bear

paw depicted on the face. Their wrist-guards incorporate pieces from or are made from a bear scapula.

## Hopi Society

The groups that emerged into the First World derived their clan names from specific events. One clan (extended family group) came upon a dead bear along the Little Colorado River. Believing this to be a sign they adopted it as their clan name—Bear. Another clan, traveling some days after the first, came upon the bear carcass. They found that the hair had been removed from the hide and used by small animals in their nests. This clan cut carrying straps from the remaining hide and became the Strap Clan. A little later another clan came upon the carcass and found only a little dried fat adhering to the bear's eye sockets and they became the Grease Eye Socket Clan. Yet another Hopi band came upon the same carcass still later, when all that was left was the skeleton. There were gopher holes all around the skeleton and this clan became the Gopher Clan. Even later the last clan came upon the same bear carcass and found a bluebird perched on the carcass eating bits of dried meat still clinging to the bones. They became the Bluebird Clan. All these clans are related and considered part of the larger Bear Clan.

Hopi tradition assigns priority to the Second Mesa community of Shongopavi that was founded by the Bear Clan. As other clans arrived the chief (*kikmongwi*) of the Bear Clan considered their contribution and assigned them lands and a place to live.

## Bear Clan

When the Hopi emerged into the Fourth World, Masaw told each group how to make migrations around the world, how to recognize where to settle, and how to make their living. Masaw gave the Bear Clan stone tablets which are held by clan members that describe his instructions and include images of bear tracks.

Bear clan members have the power to cure. They learned this from Badger and the two are often associated with one another in tales, ceremony and ritual. The bear paw is the symbol of both the Bear Clan and of a curer. In December the Bear Clan holds a ceremony to cure bear-sent sickness (is this idea derived from the observation of bears going into and emerging from hibernation?). A curer impersonates a bear by pulling on bear paws (this is the obverse of the belief that bears can shed their skin and thus become human which is found in many cultures) and then chewing bear root (*Eriae folius*, identified by some as *Ligusticum parkeri* an umbelliferacea, commonly used in herbal medicines today and reputed to be rubbed, by bears, on the body; others identify it as an aster.) which gives them the power to cure. The plant induces a trance-like state during which the curer can see the cause of the illness. Today Hopi identify Bear and Badger Clan members as curers and consult them when they are ill.

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## Ursus Website and Volume 14

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### Ursus Website

Ursus now has it's own website:  
[www.ursusjournal.com](http://www.ursusjournal.com).

### Ursus Volume 14, Number 1

Starting with volume 14 (2003), *Ursus* will be published twice yearly, in spring and autumn. Each issue will be somewhat shorter than previous volumes, but the total number of papers in each year's *Ursus* will be similar. Time between submission and publication will be reduced as a result of this change. IBA members will receive both issues of *Ursus* in any given year (use the form on page 33 to join). *Ursus* 14(1) will be mailed in mid-June 2003.

### Ursus 14(1) Contents Ecology and Behavior

Relationships of variable mast production to American black bear reproductive parameters in New Mexico by Cecily M. Costello, Donald E. Jones, Robert M. Inman, Kristine H. Inman, Bruce C. Thompson and Howard B. Quigley.

Brown bear population structure in core and periphery: Analysis of hunting statistics from Russian Karelia and Finland by Ilpo Kojola, Pyotr I. Danilov, Hanna-Mari Laitala, Vladimir Belkin and Andrei Yakimov.

Microhabitat characteristics of American black bear nest dens by Donald A. Martorello and Michael R. Pelton.

Using landscape structure to classify grizzly bear density in Alberta Yellowhead ecosystem bear management units by Charlene

Popplewell, Steven E. Franklin, Gordon Stenhouse and Mryka Hall-Beyer.

Behavioral persistence in captive bears: implications for reintroduction by Sophie S. Vickery and Georgia J. Mason.

### Bear-Human Interactions

Human injuries inflicted by bears in Alberta: 1960-98 by Stephen Herrero and Andrew Higgins.

Knowledge and opinions of stakeholders of American black bear management in Virginia by Nelson W. Lafon, Steve L. McMullin and David E. Steffen.

Polar bear-human interactions in Canadian national parks, 1986-2000 by Douglas Clark.

Brown bear-livestock conflicts in a bear conservation zone in Norway: Are cattle a good alternative to sheep? by Barbara Zimmermann, Petter Wabakken and Michael Dötterer.

Human casualties and livestock depredation by Asiatic black and brown bears in the Indian Himalaya, 1989-98 by N.P.S. Chauhan.

Anesthesia of grizzly bears using xylazine-zolazepam-tiletamine or zolazepam-tiletamine by Marc R. L. Cattet, Nigel A. Caulkett and Gordon B. Stenhouse.

### Short Communications

Effects of pruning and brush clearing on debarking within damaged conifer stands by Japanese black bears by Koji Yamazaki.

Observations on food habits of Asiatic black bear in Kedarnath wildlife sanctuary, India and preliminary evidence on their role in enhancing seed germination and dispersal by S. Sathyakumar and S. Viswanath.

## Bear Action Plan PDF

The *Bear Conservation Action Plan* is now available online from IUCN as PDF files. Go to:  
<http://www.iucn.org/themes/ssc/actionplans/actionplanindex.htm>  
and scroll down to bears.



## Information Please

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I am a picture researcher at Dorling Kindersley book publishers working on a children's book for five-to-seven-year-olds on the life-cycle of brown bears. I need images of young cubs, newborn to two months, preferably in the den and also shots of empty dens.

Please email low resolution jpg file previews to me at [marie.osborn@dk.com](mailto:marie.osborn@dk.com) by May.

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## Resolution of the Second International Brown and Asian Bear Symposium

The Symposium was organized with the support of the CIC (International Council for Game and Wildlife Conservation, website <http://www.cic-wildlife.org>), Dieter Schramm, President; and the Rosohotrybolovsoyuz Association (Russian Association of Hunters and Fishermen), Alexander Ulitin, President. The Symposium is grateful to both groups.

### Prologue

The brown bear (*Ursus arctos*) and the Asian bear (*Ursus thibetanus*), as game species, have long attracted the attention of the public. The CIC II International Brown and Asian Bear Symposium held 4-5 November 2002 in Moscow assembled 44 scientists and representatives of NGOs (IUCN Species Survival Group and hunting organizations) from eight European countries including Russia.

Prominent amongst the topics was the brown bear—"the Russian bear," a widespread species in Russia. Both a valuable cultural resource, and, unfortunately, a potential pest in cultivated landscapes.

The growing pressure from humans on bears increasingly results in a confrontation between bears and humans. Some territories in Russia have a high density of bears and there is a necessity to regulate the population.

Such regulation must include habitat conservation for valuable brown bear populations, as well as for populations which are under threat of elimination. Regulations must include IUCN sustainable use principles to benefit the conservation of biological diversity.

### Status

The Symposium marked a noticeable decrease of bear populations in a number of regions of Russia, mainly due to the lack of strict hunting laws (resulting in illegal hunting), various

environmental causes such as fires, growing habitat losses caused by the disturbance of multiple human uses, etc.

About 130,000 brown bear and approximately 6,000 Asian black bear indicate a drop in population compared with a CIC census in the 1970s.

Overexploitation in parts of Eastern Europe and Asia resulted in a measurable decrease of skull size, which indicates species degradation.

On the positive side, in some European and Asian countries, brown bear populations are growing because of conscientious management and efficient strategies of conservation and usage regulation.

### Goals and Objectives

The CIC supports the conservation of viable brown bear populations in adequate habitats through sustainable use (ecological, economic, social and cultural) and with proven benefits for local people.

### Management Guidelines

The participants of the Symposium urge stakeholders to improve/create the legal framework for habitat evaluation procedures, objective monitoring systems, as well as strict trans-boundary coordinated hunting regulation of large areas across national borders.

This requires:

1. Wildlife ecological spatial planning including refuge areas (wilderness areas, national parks, etc.)
2. Effective hunting rules and regulations with the best management expertise based on the October 2002 Amman Resolution of IUCN. These cross-border coordinated hunting laws must give special emphasis to the elimination of illegal hunting practices.
3. Objective monitoring systems are the basis of bear management performance control and need proper experts, scientists, govern-

mental agency protection of game animals and public hunting organizations.

### Conclusions

- Particularly in the main brown bear countries of Eastern Europe and Asia, including Russia, national governments are requested to perfect the legal basis for the sustainable use of the brown bear populations. Such wise use must provide tangible benefits for local communities as well as for the general public as the IUCN-recognized tool for the conservation of brown bear populations (especially threatened populations) and their habitats.

- The above must entail wildlife management education as well as communication strategies of all land users dealing with brown bear management. Therefore governments must create channels to communicate the tasks outlined above. This can only be achieved through the cooperative efforts of government agencies, scientific institutes, industrial enterprises, hunting and forest facilities, and mass media.

- The status of brown bear and Asian bear groups in some regions of Russia is cause for alarm for their future. The Symposium recommends that the Russian Ministry of Agriculture in cooperation with the Russian Ministry of Nature work to execute all necessary measures of conservation of these groups using modern scientific data collection and monitoring methods.

- A detailed list of actions and descriptions of the bear situation, including in Russia, has been developed and approved by the meeting participants. Contact:

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## Events

# Fifteenth International Conference on Bear Research & Management 8-13 February 2004 San Diego, California, USA

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### Invited Papers

Dave Garshelis and Sterling Miller were appointed to develop a slate of invited papers for the San Diego conference. Richard Callas and Dave Smith were appointed to work with them on invited papers on California topics. Invited papers and lead authors on the agenda so far are:

Andy Derocher (University of Alberta): "Status, Trends and Risks of Polar Bears of the World,"

Chuck Schwartz (USGS Inter-agency Grizzly Bear Study Team Leader for Yellowstone): "A Review of Status and Trends of the Grizzly Bear in the Yellowstone Ecosystem,"

Charlie Robins (Washington State University): "A Review of Physiological Studies on Bear Nutrition,"

Chris Servheen (USFWS Grizzly Bear Recovery Coordinator): "Small Brown Bear Populations Worldwide: A Summary of Conservation Actions and Results,"

Bruce McLellan (British Columbia Forest Service): "Effects of Roads on Grizzly Bears,"

(undetermined): "A Review of the Decline and Extinction of the Grizzly Bear in California."

Additional topics for invited papers remain under consideration.

### Call for Papers

#### Deadline 15 September 2003

#### Preliminary Topics

Bear/Human Conflicts  
Field/Lab/Statistical Techniques  
Habitat Assessment/Relationships  
Genetics/Physiology  
Conservation Biology

#### Presentation Types

1. Oral Presentation (15 minute speech and paper intended for publication in *Ursus*).
2. Poster paper intended for publication in *Ursus*.
3. Poster paper not intended for publication in *Ursus*.
4. Invited Speaker (25 minute speech).

#### How to Submit an Abstract

English summaries of one page should be sent in WORD format on a 3.5 inch disk, CD or as an attachment to an email (ASCII format copy in the email message is acceptable). List all authors and affiliations as well as present address, phone number, fax number and email address. Please indicate whether the summary is for a paper for presentation or a poster. Please submit summaries to Doug Updike at the address above.

Early submission is encouraged for papers intended for publication in *Ursus*, as the review process is separate from that of the conference. Abstracts should be submitted to Doug Updike at the address above. Submit complete papers to *Ursus*:  
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### Traveling From Outside USA?

We hope there will be a great foreign participation at the 15th conference in San Diego. Citizens of some countries are allowed to enter the United States without a visa, by completing a visa waiver form at the border. As of 1 October 2003, passport requirements will increase for citizens who enter without visas. After that date, passports must meet U.S. requirements for electronic reading. Your electronically readable passport may not meet the new U.S. requirements (for example, most Norwegian passports do not). If your passport does not meet these requirements, you must either obtain one or apply for a visa to attend the conference. In addition, Canadians now need proof of citizenship (birth certificate) and photo identification or a passport. A driver's license alone is no longer sufficient.

For more information, visit [www.usvisa.gov](http://www.usvisa.gov) or [http://travel.state.gov/visa\\_services.html](http://travel.state.gov/visa_services.html) (go to visitor visas), or call U.S. Visa Services, Washington, D.C. (202) 663-1225 for general taped information, with an option to speak with an officer. The Embassy Consular section abroad is generally your first point of contact to inquire about your visa application status.

We hope this does not cause too much inconvenience.

### Registration

The August newsletter will include a registration form or register at <http://www.dfg.ca.gov/iba/>.

### Hotel

Two hundred rooms (US\$110.00/room) have been reserved at the Bahia Resort Hotel ([www.bahiahotel.com](http://www.bahiahotel.com)).

## Sixteenth IBA Conference 2005 Italy

Plans will be reported as they develop.

## Field Trips

The conference field day is 11 February 2004. Below are some of the choices for planned activities.

<p><b>Disneyland</b></p> <p>Magical theme park with rides, entertainment, shopping and dining. Variety of activities for all age groups.</p> <p>Visit Disneyland's Website at:  <a href="http://disneyland.disney.go.com/dlr/index">http://disneyland.disney.go.com/dlr/index</a></p>		<p><b>Balboa Park</b></p> <p>A collection of gardens, cultural centers and museums with themes ranging from fine arts, railroad, aerospace to natural history.</p> <p>Visit the Balboa Park Website at:  <a href="http://www.balboapark.org/">http://www.balboapark.org/</a></p>	
<p><b>San Diego Wild Animal Park</b></p> <p>Located in the hills of the San Pasqual Valley, this 1,800 acre preserve is home to rare and exotic plants and animals alike. Take an African Safari tour viewing animals roaming free in their natural habitat.</p> <p>Visit the SD Wild Animal Park Website at:  <a href="http://www.sandiegozoo.org/wap/homepage.php3">http://www.sandiegozoo.org/wap/homepage.php3</a></p>		<p><b>San Diego Zoo</b></p> <p>More than 4,000 animals in a zoo environment designed to reflect the animals' natural habitat. Visit the central African jungle, Gorilla Tropics and Polar Bear Plunge.</p> <p>Visit the SD Zoo Website at:  <a href="http://www.sandiegozoo.org/zoo/homepage.php3">http://www.sandiegozoo.org/zoo/homepage.php3</a></p>	
<p><b>Deep Sea Fishing Trip</b></p> <p>Take a morning or afternoon deep sea fishing trip for halibut, yellowtail, tunas, bass, barracuda and other ocean species.</p> <p>For prices visit the Excursions Website at:  <a href="http://www.dfg.ca.gov/hunting/bear/iba/excursions.htm">http://www.dfg.ca.gov/hunting/bear/iba/excursions.htm</a></p>		<p><b>Whale Watching/Pelagic Birding Trip</b></p> <p>Take a 3 or 5 hour tour off the coast of California for the ultimate pelagic birding experience and viewing of migrating whales.</p> <p>For prices visit the Excursions Website at:  <a href="http://www.dfg.ca.gov/hunting/bear/iba/excursions.htm">http://www.dfg.ca.gov/hunting/bear/iba/excursions.htm</a></p>	
<p><b>Sea World Park Admission:</b></p> <p>An educational theme park filled adventure rides, marine life exhibits, interactive feeding exhibits with dolphins, a wild arctic research center with a simulated jet helicopter, and shows featuring Shamu the orca.</p> <p>Visit the Sea World Website at:  <a href="http://www.buschgardens.com/seaworld/ca/">http://www.buschgardens.com/seaworld/ca/</a></p>			



# International Bear News

The quarterly newsletter of the International Association for Bear Research and Management (IBA).

Editor: Teresa DeLorenzo, Design Editor: Cynthia Cheney, Conservation Publications, Inc.

*International Bear News*, ISSN #1064-1564

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## Editorial Policy

*International Bear News* welcomes articles about biology, conservation and/or management of the world's eight bear species. Submissions of a maximum 750-1500 words are preferred, and relevant photos, drawings and charts are appreciated. Electronic 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, edit or shorten submissions.

**Deadline for the August 2003 issue is 15 July 2003.**

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

**Thank you to CityGraphics, Portland, Oregon, USA for generously discounting the cost of printing.**

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**Use the form on the page 33 to order or renew memberships, make donations, and update member information.**

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\*term expires 2004

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 Donation (if possible!) included to help defray costs of sending *Ursus*. US\$ \_\_\_\_\_

## GIFTS & CONTRIBUTIONS

- Gift Standard Membership US\$50/year, US\$45/year for three or more years.  
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 Gift Institutional Membership US\$100/year or US\$250/three years. # Years \_\_\_\_\_ US\$ \_\_\_\_\_  
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\_\_\_\_\_ IBA Please Choose a Deserving Gift Recipient.

- Tax Deductible Contribution to IBA US\$ \_\_\_\_\_

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- Check or Money Order in US\$. Make payable to IBA.    MasterCard    VISA

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**SEND TO:**   Joseph Clark, IBA Secretary  
 USGS-S AFL, University of Tennessee  
 274 Ellington Hall, Knoxville, Tennessee 37996, USA  
 Fax (865) 974-3555 or Email jclark1@utk.edu

Please fill out both sides of the form!  
 Download form at [www.bearbiology.com](http://www.bearbiology.com).

### OFFICE USE ONLY

May 2003, Vol. 12, No. 2

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# IBA Member Application, cont'd.

**Please Complete Information on Both Sides of 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		
<b>American Black Bear**</b>	years		Legislative Processes		
<b>Asiatic Black Bear**</b>	years		Life History		
<b>Andean Bear**</b>	years		Management		
Awards*			Member Concerns*		
Bear-Human Conflict			Media Relations		
Bears in Culture			Mentoring/Training*		
Behavior			Newsletter*		
Bylaws*			Nominations*		
<b>Brown Bear**</b>	years		Nuisance/Damage Management		
Conferences*			Nutrition		
Conservation*			Organizational Development		
Disease			Pathology		
Economic Development*			Physiology		
Education/Outreach*			<b>Polar Bear**</b>	years	
Enforcement			Policy*		
Ethics*			Population Dynamics		
Evolution			Quantitative Analysis		
Field Research			<b>Sloth Bear**</b>	years	
Financial Management			Strategic Planning*		
Food Habits			<b>Sun Bear**</b>	years	
Genetics			Toxicology		
<b>Giant Panda**</b>	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 member directory \_\_\_\_\_

**Thank you for completing the survey, please tear out and mail or fax!**

# IBA Publications Order Form

<i>Ursus Journal &amp; IBA Conference Proceedings*</i>	Cost*	Quantity	Total
4th 1980 Montana 1977	\$30.00	_____	_____
5th 1983 Wisconsin 1980	\$30.00	_____	_____
6th 1986 Arizona 1983	\$30.00	_____	_____
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9th (1) 1994 Montana 1992	\$45.00	_____	_____
9th (2) 1997 France 1992	\$25.00	_____	_____
10th 1998 <i>Ursus-Alaska/Sweden '95</i>	\$40.00	_____	_____
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12th 2001 <i>Ursus 12</i>	\$45.00	_____	_____
13th 2002 <i>Ursus 13 inc. w/ Std. Membership</i>	\$45.00	_____	_____
*40% discount for 3 or more volumes, except <i>Ursus 13</i> .		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	_____	_____
15th 2002 Massachusetts 1999	\$15.00	_____	_____
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***Western Black Bear Workshop Proceedings, USA***

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***Safety in Bear Country Videos***

<i>Staying Safe in Bear Country</i>	\$20.00	_____	_____
<i>Staying Safe in Bear Country &amp; Working in Bear Country</i>	\$30.00	_____	_____
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<i>Staying Safe in Bear Country/Working in Bear Country</i> PPR	\$129.00	_____	_____

***Monographs of the IBA***

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By J. J. Craighead	\$10.00	_____	_____
<b><i>The Status and Conservation of the Bears of the World</i> (#2, 1989)</b>			
By C. Servheen	\$10.00	_____	_____
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Edited by M. Taylor	\$10.00	_____	_____
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Please fill out form legibly!



TM

Form also available at [www.bearbiology.com](http://www.bearbiology.com).



### **International Bear News**

The Newsletter of the International Association  
for Bear Research and Management (IBA)  
10907 Northwest Copeland Street  
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## **Join IBA**

**Membership Includes *International Bear News* and *Ursus*.  
Consider donating a membership to a deserving biologist.  
Use the form on page 33 or [www.bearbiology.com](http://www.bearbiology.com)**

### **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 (USA tax # 94-3102570) organization open to professional biologists, wildlife managers and others dedicated to the conservation of all bear species. The organization has over 700 members from over 45 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 annual 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.

**Deadline for the August 2003 issue is 15 July 2003**

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