

The Bear Conservation Fund

Conserving the world's bears through science and education

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The International Association for Bear Research and Management

Annual Report to Donors

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The Bear Conservation Fund

Administered by The International Association for Bear Research and Management (IBA)

Contact at: knoyce@bearconservationfund.org

Website: www.bearconservationfund.org

The Year in Review, in Brief ...

The past 15 months have been an important time for the Bear Conservation Fund (BCF) - a time for defining goals and gaining momentum. A major leadership gift from the McGuire Family Foundation (page 3) nearly tripled the amount that we were able to provide for IBA's programs in 2006. Research and Conservation Grants increased by 55 % and IBA created an exciting new program, entitled Experience and Exchange Grants. These grants fill a funding need, enabling researchers and managers, young and old, to engage in working partnerships with other projects, where on-site consultation,

training, and collaboration will provide the most effective jump-start for new bear research and conservation work. Finally, BCF's growing funds make it possible for IBA to expand Publications Outreach, a small but cost-effective program through which IBA provides International Bear News, its quarterly newsletter, and Ursus, its technical journal, to biologists who need these valuable sources



Andean bear : Heinz Plenge

information, but have no funds to purchase publications.

In administrative news, IBA incorporated in the state of Alaska in June, 2005, solidifying its place as a non-profit entity in perpetuity and better safeguarding its assets. We are finalizing a new \$250,000 endowment fund, the Homer Bear Conservation Fund, thanks to a gift from an unnamed donor. Sam Skaggs Investments, Juneau, Alaska, will manage the fund. Annual proceeds will support Research and Conservation Grants, specifically projects on the least known and most vulnerable bear populations.

If 2005 was the year to gain momentum, 2006 is the year to maintain that momentum and accelerate progress towards our goals. With this report, we hope to provide you, our contributors, with a clear understanding of those goals and our progress to date. Thank you for your support.

Karen Noyce Chair, Bear Conservation Fund

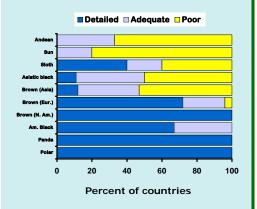




Status of the World's Bears: World Conservation Union (IUCN) "Red List"

| <u>Species</u> | <u>Status</u> | <u>Trend</u> |
|--------------------|----------------|--------------|
| Malayan Sun Bear | Deficient Data | . ? |
| Asiatic Black Bear | Vulnerable | ? |
| Sloth Bear | Vulnerable | ? |
| Andean Bear | Vulnerable | ? |
| Giant Panda | Endangered | ? |
| Polar Bear | Vulnerable | \downarrow |
| Brown Bear | Not Classified | 1 ↑ |
| Am. Black Bear | Not Classified | i ↑ |

Fig 1. Status of knowledge of bear distribution



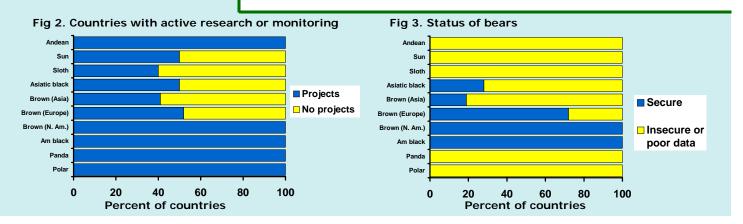
Status of the world's bears: how do we measure progress?

The Bear Conservation Fund was launched in 2004, out of recognition that needs for coordinated progress in global bear conservation were not being met through existing sources of funds. Six of the world's 8 species of bears are listed by The World Conservation Union (IUCN) as Endangered (1 sp), Vulnerable (4 sp), or Data Deficient (1 sp) (see inset), and although brown bears are secure throughout much of their range, in many parts of Europe and Asia their populations are vulnerable, due to excessive human impact. Even the status of the American black bear is unclear in parts of Mexico.

The ultimate goal of IBA and the Bear Conservation Fund is, of course, to see all 8 species of bears secure throughout their range. This will take years, and may now never be possible for the most specialized bears, polar bears and pandas, because of major changes (e.g. global warming), set in motion during human history. In the meantime, however, we must find ways to measure progress towards this goal, year to year and across a global front.

It is difficult to find the best metrics for measuring such progress. Achieving conservation success typically involves several sequential steps: 1) assessing the distribution, relative abundance, and status of a population using field investigations and local oral and written historic records; 2) Conducting ecological field studies in regions of highest priority, to yield data on reproduction, mortality and bear-human interactions. These form the basis of science-based conservation management plans; 3) Building local/regional expertise and support for conservation through education and training; 4) Implementing conservation measures, including population monitoring.

Three measures with which we can start benchmarking progress include: 1) the quality of data available on bear distribution, 2) the presence or absence of active research and scientific monitoring, and 3) current vulnerability of the bear population(s) in each country with bears (Figs 1-3). Currently, information is most lacking in Asian and South American countries, where many populations are insecure. The best-understood species include the 2 **most** secure species (American black bear and brown bear) and the 2 **least secure**, (polar bears and pandas), i.e. those that have received the most conservation money and attention. We will measure progress in these areas each year. We will further refine these measures to assess progress on populations within countries and also develop measures of local support for bear conservation.



McGuire Family Foundation gives \$50,000 for bear conservation

Early in 2006, the Bear Conservation Fund (BCF) received a \$50,000 leadership grant from the William and Nadine McGuire Family Foundation, of Wayzata, Minnesota, to support IBA's science-based approach to bear conservation around the world. Bill and Nadine McGuire, with daughters Marissa and Chelsea, are known for their support for endeavors that build basic scientific knowledge and translate knowledge into action. In 2000, the McGuires provided funds for the University of Florida to build the McGuire Centers for Insect Conservation and Lepidoptera Research. Another gift in 2003, established and endowed the McGuire Institute for Biodiversity and the Environment, a program focusing on the ecological importance of biodiversity and preserving biodiversity while addressing environmental and human population issues that are adversely impacting the world. The McGuires have had a long-time interest in Lepidoptera and have donated major collections to the University of Florida in the past.

More recently, the McGuire Foundation provided critical funds to underwrite the building of a new Translational Research Facility at the University of Minnesota, which will focus on translating cutting-edge biomedical research into medical applications. The family provides ongoing support to the Minnesota Zoo, particularly for their outreach and education programming, and have been enthusiastic supporters of the arts and creating green space in the Minneapolis-St.

Table 1. BCF donations received March 2005 – Feb 2006 and allocation to 2006 programs

| Donations to BCF | | Program Allocation | | | | |
|-------------------------------|------------|----------------------------|--------------------|--------------------|--------------------------|--|
| Received | Total \$\$ | Allocated to program year: | Res/Cons Grants | Exp/Exch Grants | Publications Outreach | |
| 1 March 2004 – 28 Feb 2005 | \$27,574 | 2005 | \$23,700 | \$3874 | \$0 | |
| 1 March 2005 – 28 Feb 2006 | \$76,600 | 2006 | \$71,100 ** | \$3000 | \$2500 | |

Paul metropolitan area.

The McGuire Family gift to the Bear Conservation Fund means a great deal to IBA, both in terms of our ability to increase support for projects this year, and our potential to attract similar support in the future. The challenge is before us to match this vote of confidence with further growth and development in our programs. We thank the McGuires for their generosity.

BCF announces new endowment for bear conservation

** \$71,100 + \$12,750 from the Bevins Memorial Fund = \$83,850 total for Res/Cons Grants in 2006.

IBA is currently finalizing arrangements with an unnamed donor to convert his gift of \$250,000 to the Bear Conservation Fund into a permanent endowment, to be known as the Homer Bear Conservation Fund. This endowment will be managed to provide annual proceeds for IBA's Research and Conservation Grants program, meanwhile maintaining and growing the principal investment so as to provide an assured source of future funding.

The new endowment has the specific objective of providing financial assistance for: a) projects that focus on the conservation of wild bear populations and the environments that support them, with particular emphasis on real world situations where wild bears and their habitats are facing serious threats, and b) projects located outside of the USA and Canada in places where funding sources are not as available as in North America. Only projects that have gone through review by the Research and Conservation Grants Committee of the IBA and that are judged

by the Homer Fund's Board to be consistent with these criteria will be eligible to receive money from this endowment.

The Homer Bear Conservation Fund will be open to contributions from others whose interests are aligned with the specifications of this fund and who like the idea of adding to a permanent endowment to support projects of this type.



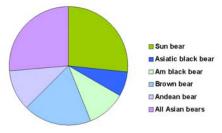


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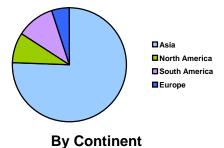


Sun bear habitat, Borneo: Siew Te Wong

Fig 4. GRANTS ALLOCATION



By Species







By Project Type

Research and Conservation Grants

Program Chair: Dr. Frederick C. Dean deansfs@alaska.net

In March, IBA awarded \$83,700 in Research and Conservation Grants for projects in 2006. This represents an increase of 55% over 2005 and 78% over 2000. However, requests for funds climbed to nearly \$200,000 this year, meaning that many deserving proposals still had to be turned down. Twelve of 26 projects were funded.

Selection criteria give priority to projects that: 1) further efforts to gather complete, current, high quality information on the distribution and status of bear species, particularly in Asia and South America, 2) respond to serious conservation threats, 3) increase local support and participation in bear research and conservation work, 4) build local professional capacity in bear biology and

conservation, 5) illuminate biology and behavior and/or develop new methods so as to be widely relevant to other bear studies, and 6) complete or build on work IBA has previously supported. This year, for the first time, funds were sufficient to award \$22,000 to the Bear Specialist Group of the World Conservation Union (IUCN) for a cooperative, multi-country project that will synthesize current information on population status of bears across Asia (all species) and convene experts from throughout the continent to identify areas of greatest importance and create a blueprint for coordinated conservation progress. This project should have wide benefits for many years to come.

A complete list of projects supported in 2006 appears on page 7 of this report. Five represent studies in their second year of IBA support, including the study by Siew Te Wong, pictured on this page, of the relationship between tropical forest logging, Malayan sun bears, and bearded pigs (which rely on many of the same foods as bears) in Borneo.

Allocation of grants by species, continent, and type of project are shown in Fig 4. Over two-thirds of funds are going to Asia. Nearly half are being used for basic documentation of bear distribution and population status, the critical first step in conservation programs. Another 40% of funds will support ecological investigations, the second crucial component of science-

based conservation. These will yield new ecological information and shed light specific threats populations. As progress is made in these basic areas, we will look forward to seeing more proposals in the future dealing with education, training, developing management plans, and building local expertise and support for bears.



Sun bear research, Borneo: Siew Te Wong

Project Profile: Iran

Ten years ago it was thought that only a small number of brown bears remained in Iran's mountains, and a small isolated population of Asiatic black bears in Baluchestan. Bernhard Gutleb, an Austrian biologist, used his knowledge of Farsi, the official language of Iran, and his



Bernhard Gutleb

keen interest in bears, to document this situation. With colleagues Ramazanali Ghaemi and Amin Hamed Hashemi of Iran and Josip Kusak of Croatia, Bernhard received two 2-year IBA grants, to document the distribution and status of brown bears and Asiatic black bears in Iran, a country 3 times the size of France.

"We were able to estimate the total number of bears and ... potential threats to bears (poaching, deforestation, etc.)

in different areas. We exploited all sources of available information and we conducted field work to document the presence or absence of bears.

"The most significant outcome [is] a reliable distribution map of both bear species in Iran. We now know that there is no actual risk for brown bears on the northern slopes of the Elburz mountains, but the situation is not so positive for the other brown bear populations, each numbering 100 or less bears, and is already critical for the 30-50 remaining Asiatic Black bears.

"I'm preparing a project proposal about habitat use of brown bears in the Caspian forest; we are looking for ways to have better, long term data on Asiatic black bear in

southeast Iran, maybe with a local student. The biggest needs for continued work are financial and Without IBA personnel resources. and its international conferences I probably would have remained a "provincial scientist" in this field. The IBA funds were the biggest motivation and the only way to get my work in Iran run...The project had a good output with low costs. With IBA [my colleagues and] I hope to be able to go deeper into details of bears in Iran in the near future."

Project Profile: Ecuador

Armando Castellanos leads a study of Andean bears in the cloud forests of north eastern Ecuador. His goal is to develop conservation alternatives for this region, where bear habitat is increasingly fragmented and conflict between bears and humans is common. In addition to studying bear ecology, Armando educates the community about bears and runs a facility to rehabilitate confiscated bears. Armando received IBA Research & Conservation

grants for his work in 2003 and 2004. Here he reflects on his work:

"What attracted me to [this] work was the real [need for] ecological studies for theconservation... Andean populations, particularly fragmented i nlandscapes. Thanks to funds provided by IBA to support our radiotelemetry studies, have identified fundamental wildlife



Armando Castellanos with radio-collared bear

corridors used [by bears] to move between forest patches and. have therefore been able to protect and conserve them. ... The people of the Intag region are more aware of the Andean bear's existence. They are beginning to realise that bears aren't a plague, and as a result, are now less likely to hunt bears that damage their maize.

"In the protection of Andean bears, [we] aid the survival of other species that share the Andean bears' habitat. My current plans are to broaden the...project to

new areas....to evaluate
the effects of
deforestation on Andean
bear populations.
Project expansion will also
allow me to educate more
people on the
importance of
conservation
of the Andean
bear and the
n a t u r a l
world."





The Bear Conservation Fund

Tomaz Skrbinsek:

"The brown bears in Slovenia [are]of great importance for future recolonization of bears into the Alps and other parts of Western Europe... There has been concern over recent developments in bear management in Slovenia...What is really missing in the current management are solid, scientific data. In past, these were practically impossible to obtain. A great opportunity has been provided recently by availability of non-invasive genetic sampling.

"The goal of the project is to start a laboratory capable of handling noninvasive samples in Slovenia... There were literally no local experts available to offer advice or help. Fortunately, help was offered by professor Lisette Waits of University of Idaho, USA, one of the foremost experts in the field... During [my] two-month exchange, [I] have had opportunity to see the workflow in a laboratory where analyses of non-invasive samples are routine... [and] to analyze 200 tissue and 400 scat samples from the Slovenian population using some of the most modern equipment available. IBA's E&E grant was of great help in realization of this exchange."

Lisette Waits:

"I think this grant program is a wonderful new idea from the IBA. It can provide new training opportunities for young scientists or help established researchers gain new skills or knowledge. It also creates great opportunity for cultural exchange among bear biologists and the ability to reflect on the similarities and differences in challenges facing bear conservation efforts in different parts of the world. I am not aware of other funding sources that provide this opportunity.

"Tomaz has been in Idaho for a little over 3 weeks now and his data collection is progressing rapidly. He is learning many new things about laboratory and data analysis from my research group, and we are also gaining new ideas from him. Outside of the lab, Tomaz has also been involved with other activities such as assisting in ground squirrel trapping and presenting a talk about Slovenia for my 6 son's first grade class."

Experience and Exchange Grants

Program Chair: Dr. Ole Jakob Sorensen

Ole.J.Sorensen@hint.no

In January, IBA announced the recipients of the first 2 Experience & Exchange (E&E) grants, followed in March by the announcement of 2 more grants for 2006. Grants provide up to \$1500 in travel costs for each successful applicant. Proposals are required to demonstrate the existence of willing partners in the exchange, in the form of a letter from the host describing their commitment to the experience and desire to host the exchange. Participants must show that there is in-kind or other support for living expenses while the exchange is in progress.

Tomaz Skrbinsek, a PhD student at the University of Ljubljana, Slovenia, is currently being hosted by Dr. Lisette Waits in her Conservation Genetics Lab at the University of Idaho for 2 months. Tomaz's stay in Idaho will give him advanced technical training in analysis of genetic samples and the experience necessary for him to return to Slovenia and upgrade his laboratory there into a facility capable of handling anticipated volumes of genetic samples from future genetic-based population and conservation work on bears and other species.

Two grants will facilitate exchange between the Kronotsky State Biosphere Preserve in Kamchatka and Parks Canada. The Kronotsky Preserve and Kamchatka's pristine expanses of bear habitat are experiencing rapid growth in tourism, with attendant increases in bear-human conflicts. Russian biologists Vladimir Mosolov and Ivan Seryodkin will travel to several Canadian parks, gaining practical experience in research and management as applied in parks, specifically research design, census techniques, human dimensions work, and applications of Geographic Information Systems. Mike Gibeau, their Canadian host biologist will visit Kamchatka to share aspects of research and management with a broader audience of Russian biologists and managers.

The final grant will enable Thomas Sharp, an American wildlife ecologist, to work with Indian colleague, Kartick Satyanarayan, head of Wildlife SOS, an Indian nonprofit conservation organization, to establish a sloth bear monitoring program in a potential wildlife reserve in the State of Karnataka and to explore solutions to human-bear conflicts that occur in the area.

The E&E grants committee was pleased with these first proposals,



Lisette Waits and Tomaz Skrbinsek

believing that exactly embody the types of exchange and the potential for lasting partnerships that IBA Council envisioned when it established the program. Many lasting benefits will certainly come from this very modest investment. We are certain that this will become a vital. effective, a n d increasingly popular program.

| IBA Grants Programs: Projects Funded for Work in 2006 | | |
|---|-----------|--|
| | | |
| Research and Conservation Grants: Delineating the distribution and conservation status of Asian bears: finding hotspots, coldspots, fuzzy spots, and benchmarks Bear Specialist Group: Dave Garshelis & Bruce McClellan | \$ 22,000 | 1-year |
| Genetic diversity and structure among Andean bear populations in the Condor Bioreserve, Ecuador M. Paulina Viteri, M.Sc. Student, Univ. Idaho, U.S.A. | 6,000 | 3-year 2nd funded |
| The effects of selective logging on Malayan sun bears and bearded pigs in lowland tropical rainforests of Borneo Siew Te Wong, PhD. student, University of Montana, U.S.A | 10,000 | multi-year 2nd funded |
| Forest fragmentation as a limiting factor in brown bear survival and distribution in European Russia Dr. Leonid Baskin, Russian Academy of Sciences | 4,320 | multi-year 3rd funded |
| Asiatic black bear conservation and management issues in Langtang National Park and Dhorpatan Hunting Reserve Bhupendra Yadav, B.Sc. Student, Inst. of Forestry, Pokhara, Nepal | 6,400 | new |
| Asiatic black bear occupancy in Sichuan Province, China — distribution mapping, trend monitoring Dr. Xiaojian Zhu, University of Peking, China. | 5,500 | multi-year 2nd funded |
| Status survey of Malayan sun bear in north-eastern India Dr. N. P. S. Chauhan , Wildlife Institute of India | 8,000 | multi-year 2nd funded |
| Indo-Malay language 'sun bear sign survey' manual for local use Gabriella Fredriksson, PhD student, University of Amsterdam. | 4,360 | 1-year |
| Evaluation of the distribution, habitat, and landscape use of the Andean bear in Sierra de Portuguesa, Venezuelan Andes — Shaenandhoa Garcia-Rangel, PhD. student, University of Cambridge, U.K. | 3,500 | 2-year 2nd funded |
| Influence of hunters' baits on behavior of American black bears Marci Johnson, M.Sc. Student, University of Wisconsin Green Bay, U.S.A. | 1,820 | 2-year 1st funded |
| Endangered Mexican black bear (Ursus americanus) ecology, conservation, and management in the State of Sonora, Mexico Dr. Carlos A. López González, Northern Rockies Conservation Cooperative. | 7,000 | multi-year 1st funded |
| Diet of Himalayan brown bears (<i>Ursus arctos isabellinus</i>) in Deosai National Park, Pakistan by using molecular genetic techniques Muhammed Ali Nawaz, PhD student, Norwegian University of Life Sciences. | 4,800 | 3-year 2nd funded |
| Experience and Exchange Grants | | |
| Brown bear management in parks: Kronotsky State Biosphere Reserve, Kamchatka, and Parks Canada — Vladimir Mosolov, Ivan Seryodkin, and Mike Gibeau, coordinated by John Paczkowski, WCS. | 4,500 | |
| Conservation genetics analysis and lab operation: U. of Idaho and Slovenia — Tomaz Skrbinsek, and Lisette Waits. | 1,500 | |
| Sloth bear monitoring and human-bear conflicts: U.S. and India — Thomas Sharp and Kartick Satyanarayan | 1,500 | Oso Bår Björn Orso Bjørn MedBegb Orso Bjørn Medved Bær Samxe |



Why Bears and Why Research?

Sometimes we are asked why we focus on ecological research, population assessment, and single species projects - would it not be better to put our efforts and resources into conservation of ecosystems, landscapes, and habitat complexes that will benefit many species? This is a good question deserving of a good answer. We present two compelling reasons here.

Habitat conservation is, of course, critical and primary. Animals cannot exist without secure habitat; this is always part of our focus in bear However, as bear biologists we have also learned that unfortunately, conserving landscapes alone does not necessarily ensure bear survival. Bears are large, visible animals that are prized by hunters in many cultures for meat, fur, and other products. Many are also killed when they come into conflict with people over agricultural crops and livestock., destruction of property, or even human life. Because bears can be relatively easy to hunt and densities are generally low, excessive unregulated killing by

people has left many places in the world depopulated of bears, despite suitable bear habitat. The most efficient way to identify specific threats to a bear population and potential solutions is to conduct species- and sitespecific studies.

The second reason is less obvious, but equally compelling. For whatever reasons, humans are drawn to other forms of life; bears seem to engender a particularly strong fascination. A single biologist launching a study of bears with modern field tools can soon reveal fascinating details of bears' lives and habits. Again and again we see that generating and sharing such information can catalyze the interest of local people, particularly when their local knowledge and expertise are also welcomed incorporated into study findings.



It has been said that "we conserve what we love, and we love what we know." When people share in the acquisition of new knowledge about the ecosystem around them and the creatures that share it, their appreciation, pride, and, yes, love, for that ecosystem increases. Once people and communities are invested in that relationship with the world, conservation is the logical outcome. Studies that focus on species like bears, which seem to possess nearly universal appeal and fascination, can be extremely effective vehicles

BCF: www.bearconservationfund.org

IBA: www.bearbiology.com

for transforming local interest and knowledge into passion for conservation that counts.

The Bear Conservation Fund

Administered by the International Association for Bear Research and Management (IBA)

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Options for Giving

Annual fund:

One hundred percent of unspecified donations go to programs of the IBA as follows: Research and Conservation grants, 85%, Experience and Exchange grants, I0%, Publications Outreach, 5%. Alternatively, funds may by directed by donors into specific programs, species, and/or geographic regions.

General Endowment:

Donations go into a general endowment fund. Annual proceeds from the fund are allocated to programs the same as annual fund.

Special Endowment — **Homer Bear Conservation Fund:**

Donations are added to the principal of this endowment fund. Annual proceeds are allocated IOO% to IBA's Research and Conservation Grants program, specifically for work on non-North American bears of significant conservation concern.

