Bear Trust International

FY 2011 Annual Report

July 1, 2010-June 30, 2011

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ABOUT BEAR TRUST

Bear Trust International identifies needs in bear conservation and gaps in conservation knowledge, develops management strategies and research programs to address needs and gaps, tests the efficacy of wildlife management strategies, uses data from research to design innovative education programs, and provides scientific results to wildlife managers.

By combining these elements, Bear Trust delivers: 1) free education programs, rooted in science, for children in grades K-12 nationwide, 2) relevant and cutting-edge research on wild bears, and, 3) scientific results that are critical for effective wildlife management. Bear Trust works collaboratively with governmental and non-governmental organizations worldwide on joint ventures to optimize talents and resources.

VISION

Bear Trust International envisions a world where wildlife prospers in its natural habitat while co-existing with environmentally sensitive economic development.

MISSION STATEMENT

Bear Trust International's mission is to help conserve wild bears, other wildlife, and their habitat. We work with governmental and non-governmental organizations around the world where bear habitat exists, focusing on the following four core program initiatives: 1) Conservation Education, 2) Wildlife Research, 3) Wild Bear Management, and, 4) Habitat Conservation.

CURRENT CONSERVATION PROJECTS

Alaska Project: Conservation, Research, and Education in AK

As part of this project, we are helping two bear-habituated communities in Alaska become bear-resistant, measure the outcome scientifically, and use data from wild bears to develop education programs for children in Alaska and beyond. Findings and methods from this project will also provide a scientifically designed and tested approach to mitigating human-wildlife conflicts throughout the U.S. and elsewhere.

Project Site: We chose the two communities of Naknek and King Salmon for our project site owing to their dire and timely need for bear-human conflict mediation, the research opportunities, the enormous potential for education outreach, and the financial need of the communities. The communities of Naknek and King Salmon are currently experiencing significant bear-human conflicts.

In Naknek, brown bears frequently visit places where children and the elderly live. Bears are common at the Bristol Bay-Borrough School (serving grades K-12), the Southwest Elders Home, and the Camai Community Health Center. In both Naknek and King Salmon, bears frequent apartment buildings owned by the local Alaska Native Corporation.

One project goal is to purchase 11 bear-resistant containers for key areas throughout Naknek and King Salmon where bear nuisance behavior is particularly high.

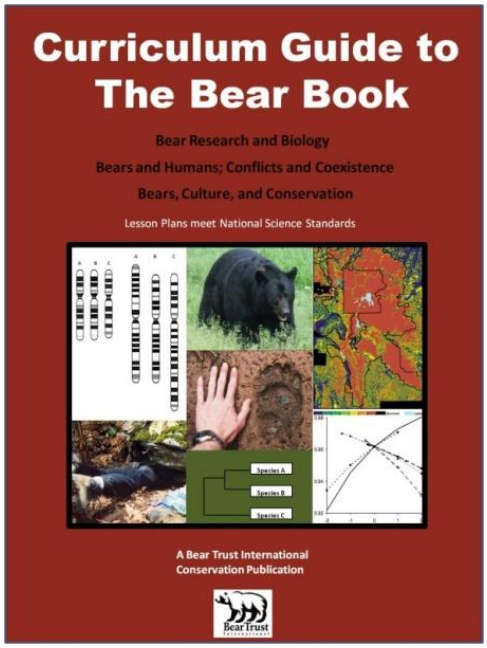
In addition, Bear Trust and the Alaska Department of Fish and Game (ADFG) want to scientifically measure the outcome of installing bear-resistant containers. We will deploy up to eight radio collars as the opportunity arises when responding to problem bear calls in 2011. Weekly attempts will be made to locate all collared bears within the area immediately surrounding King Salmon and Naknek to evaluate movement patterns and response to bear-resistant containers. In addition, we will collect data on the frequency of bear conflict calls, and bear mortality, before and after bear-resistant dumpsters are installed.

We will also provide three education programs to students in Naknek and King Salmon. The first education program will be based on research conducted locally on bears in Naknek and King Salmon. The second education program will be the Curriculum Guide to The Bear Book. The third education program will be Bear Essentials: Education Program Based on Bear Research.

Photos by Meghan Riley/ADFG

CURRENT CONSERVATION PROJECTS

The Curriculum Guide to *The Bear Book: PILOT STUDY*



Bear Trust is currently conducting a pilot study to test the efficacy of using the Curriculum Guide to The Bear Book as a teaching resource in the classroom. Bear Trust has partnered with Alaska Wildlife Conservation Center and Alaska Department of Fish and Game to conduct the pilot study in Anchorage schools during 2011-2012. We are also working on piloting these education materials in Sussex County, New Jersey. Ultimately, we envision students in Anchorage connecting with students in Sussex County as each school district works through the education program. They will be "sister school districts", where students in each district can learn from students in the other school district.

Bear Trust developed the Curriculum Guide to The Bear Book to meet needs of US high school students who regularly fall behind their global counterparts in science and math skills. Bears are charismatic animals so they make an ideal vehicle for engaging students and teaching skills in science, math, conservation, critical thinking, problem solving, and communications. The Curriculum Guide to The Bear Book introduces students to real, wildlife scientific research and uses "deeper learning" techniques to empower students and help them explore their potential for achievement. As part of our education program, we seek to open doors to wildlife research and demonstrate the exciting process of science, which may otherwise be undiscovered or unavailable to some students. The Curriculum Guide includes 10 innovative lessons, each lesson meets National Science Standards.

Lessons in the Curriculum Guide are organized into three broad categories: 1) Bear Research and Biology, 2) Bears and Humans; Conflicts and Coexistence, and, 3) Bears, Culture, and Conservation. In the Curriculum Guide, we incorporate scientific inquiry by providing teachers and students the opportunity to actively engage in the process of science: making observations, devising questions and hypotheses, summarizing information, coming to conclusions, and communicating with others about their discoveries. Because a full research study on bears would be difficult for high school students to conduct themselves, the Curriculum Guide provides opportunities for students and teachers to examine real, current data on wild bears (via scientific papers from the primary literature), come to their own conclusions, and communicate with others. Some lessons help hone mathematical and science skills. Other lessons help hone reading comprehension skills. Some lessons rely heavily on teachers guiding students in their learning, and others allow for more open-ended exploration.

CURRENT CONSERVATION PROJECTS

Colorado Project: Black Bear Exploitation of Urban Environments, Finding Management Solutions and Assessing Regional Population Effects

For this comprehensive project, we are helping a bear-habituated community become bear-resistant, measuring the outcome scientifically, and using data from the wild research bears to develop education programs for children in Colorado and beyond.

Project Site: Durango, Colorado

Project Partners: Bear Trust International, Colorado Division of Wildlife, Colorado State University, National Wildlife Research Center, Wildlife Conservation Society

Scientific Objectives:

1) Scientifically evaluate how bears respond to the installation of bear-resistant containers and determine the relative influence of natural foods, anthropogenic foods, conflict management, and harvest on bear population dynamics along the wildland-urban interface.

2) Develop population and habitat models to support the sustainable management of black bears in Colorado.

3) Test management strategies for reducing bear-human conflicts

Field crew during summer 2011; Photo by Heather Johnson

Education Objective:
We will use data collected from wild bears in the Colorado Project to develop innovative education programs that use "deeper learning" techniques. This education program will be implemented into local schools in Colorado, and will be available to teachers nationwide.

Project Update:
Field work began May 1, 2011. To date, 33 black bears have been captured: 22 males and 11 females. All 11 adult females have been fitted with GPS collars to track their movements. In total, we anticipate collaring 25 adult females so that we can reliably estimate behavioral patterns. To estimate population demographics, the field crew has already set 24 hair snares in both the urban and "wildland" areas.

CURRENT CONSERVATION PROJECTS

Bear Essentials: Education Program Based on Bear Research

Bear Essentials is a new education program that Bear Trust is developing for students in grades K-12. Lessons are based on scientifically sound bear research (some lessons include real data) and cover topics ranging from dentition/diet to population ecology and habitat selection. Each lesson meets National Science Standards.

Bear Essentials is already half-way completed and we are planning to launch the program in fall 2011.

LESSON CONTENT FOR BEAR ESSENTIALS

K-2nd Grade

Bear Basics: bears as mammals and carnivores
Dentition and Diet: what do bears eat?
Winter Physiology: what do bears do in the winter?
Population Ecology: cub births, cub care
Habitat Use and Movement: home range, habitat, habitat needs

3rd-5th Grade

Bear Basics: bears as mammals and carnivores
Dentition and Diet: dentition and food comparisons, compare different skulls
Population Ecology: estimate population size using mark-recapture and beans
Population Ecology: birth and survival rates
Habitat Use and Movement: triangulation, radio telemetry, schoolyard study on habitat variation

6th-8th Grade

Anatomy and Taxonomy: bear measurements, summarize data into graphs, evaluate data sets
Dentition and Diet: dentition and food comparisons, compare different skulls
Diet: scat content analysis
Population Ecology: introduction to Program Mark; estimate survival and growth rates
Habitat Use and Movement: radio telemetry, GIS, habitat selection analyses
Habitat Use and Movement: school yard study on habitat variation
Human Attitudes: develop human dimensions survey and conduct it
Conflicts and Attractants: securing attractants data

9th-12th Grade

Anatomy and Taxonomy: Bear DNA lesson
Dentition and Diet: scat content analysis
Population Ecology: using capture-recapture data to estimate population survival and growth rates
Population Ecology: using hair snare data to estimate population demography
Habitat Use and Movement: radio telemetry, GIS, habitat selection analyses
Human Attitudes: develop human dimensions survey and conduct it
Conflicts and Attractants: securing attractants data

CURRENT CONSERVATION PROJECTS

New Jersey Project: Conservation, Research, and Education in Sussex County, New Jersey

For this project, we are helping a bear-habituated community become bear-resistant, measuring the outcome, and using data and results from the project to develop innovative education programs for children in New Jersey and beyond.

Research bears in NJ: Photo by K. Burguess

Project Location: Great Gorge Village

Project Partners: Bear Trust International, New Jersey Division of Fish and Wildlife, East Stroudsburg University

Project Goals: The project in New Jersey will meet the following goals: 1) address the issue of bear-human conflicts, 2) increase human safety and decrease probability of bear mortality by decreasing the number of bears that become habituated to humans and garbage, 3) provide scientific information regarding how bears respond to wildlife-resistant containers in real-life situations, 4) provide innovative education opportunities for children, 5) foster community participation, and, 6) serve as a model for other communities that exist in bear habitat.

Project Update: We began this project in 2008 and we are pleased to report that Phase I of the project is complete. Bears were collared in 2008 and their activity was monitored throughout 2008 before bear-resistant dumpsters were installed in half of the project site (i.e., pre-treatment data). We also installed motion-sensitive cameras at both treatment dumpsters (i.e., dumpsters that became bear-resistant) and control dumpsters (i.e., dumpsters that remained non bear-resistant throughout Phase I of the project). In early 2009, we fitted 25 dumpsters with bear-resistant lids and bear activity was monitored throughout 2009 and 2010 (i.e., post-treatment data). A survey was developed to measure the success of the project in terms of human dimensions. This survey was distributed to all homes within the project site (approximately 1,200 homes) two times: once before and once after bear-resistant capability was achieved. In 2010, we began Phase II of the project by purchasing additional bear-resistant containers for the half of the project site that did not receive bear-resistant containers during Phase I. We continued to collect bear activity data throughout 2011.

UPCOMING CONSERVATION PROJECTS

Children's Book: The Adventures of Missy the Bear Biologist

Bear Trust is in the early stages of developing and publishing a book for children based on real life experiences of a female bear biologist. One goal will be to educate and empower children, particularly young girls.

Research and Education: Gobi Bear

Bear Trust is in the beginning stages of collaborating with Berengia South on important research on the critically endangered Gobi bear. Berengia South has already initiated Gobi bear research in Mongolia; Bear Trust plans to use data and results from the research to develop innovative education programs for children in Mongolia and throughout the US. Ultimately, we seek to find ways to connect U.S. children with children in Mongolia via social networking so that they may share ideas, issues, and concerns.

Research and Education: Louisiana Black Bear

Bear Trust plans to collaborate with the East Texas Black Bear Task Force to identify gaps in knowledge about, and needs in conservation for, the Louisiana Black Bear. We plan to develop research to address gaps and needs and will ultimately provide data to wildlife managers. We will use some data and results from this project to develop innovative education programs for children in Louisiana and beyond.

Photo by D. Maehr

RECENTLY COMPLETED AND ONGOING CONSERVATION PROJECTS

Virginia Project: Conservation and Education in Alleghany County

Bear Trust recently completed our Lake Moomaw Project in Virginia! The Lake Moomaw area hosts over 25,000 recreation visitors annually and had been experiencing a dangerously sharp increase in the number of nuisance bear incidents. To protect both humans and bears, the need for bear-resistant containers was significant. We completed Phase I of our project in 2008 and we completed Phase II of our project in 2010 by installing bear-resistant containers throughout the recreation area. We also helped to provid on-site education to recreation visitors during 2008-2010.

Wisconsin Project: Conservation and Education in the Great Lakes Region

In 2007, Bear Trust completed Phase I of our Wisconsin Project by installing eleven 3-yard, bear-resistant dumpsters in the Clam Lake region of the Chequamegan-Nicolet National Forest. We are currently fund raising to complete Phase II of this project. We need to raise funding to pay for eight additional large wildlife-resistant dumpsters and 12 small wildlife-resistant containers. We plan to include students in the Clam Lake area in our pilot studies.

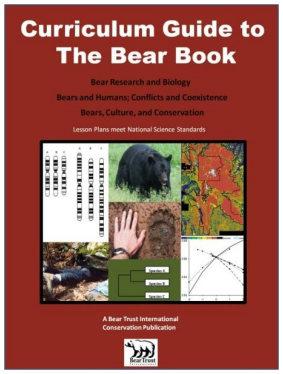
East Texas Black Bear Project

Bear Trust International was integral to the initial formation of the East Texas Black Bear Task Force. The East Texas Black Bear Task Force (ETBBTF) is an official sub-committee of the Black Bear Conservation Committee (BBCC). The BBCC is a 501(c) (3) non-profit organization established in 1990 that works "…to promote the restoration of the Louisiana Black Bear in its historic range through education, research, and habitat management." The ETBBTF meets three times annually to promote the implementation of the East Texas Black Bear Conservation and Management Plan.

The ETBBTF was loosely formed in early 2001 to formally work within the BBCC framework to inform and educate Texans about Black Bears. Since 2005, the ETBBTF has focused on priority goals and objectives of the 2005 East Texas Black Bear Conservation & Management Plan. The ETBBTF carries on the mission of the BBCC through promoting the restoration of the Louisiana Black Bear in its historic range (east Texas) through education, research, and habitat management.

RECENTLY COMPLETED AND ONGOING CONSERVATION PROJECTS

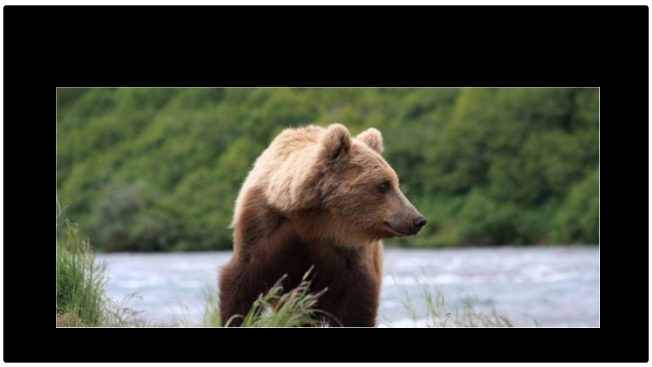
Curriculum Guide to The Bear Book



In late 2010, Bear Trust completed the development of The Curriculum Guide to The Bear Book. The goal of the Curriculum Guide is to provide innovative education experiences for students in grades 9-12. The Curriculum Guide builds on research covered in The Bear Book, another Bear Trust publication. The Curriculum Guide also references other peer-reviewed manuscripts on wild bear research. All 10 lessons meet National Science Standards.

Bear Trust Website

In May and June 2011, Bear Trust completely renovated the organization website. We added social networking options, donation options (e.g., credit card, JustGive options, etc.), and we updated the entire layout for ease of use by viewers.



Brown bear in Alaska: photo by M. Riley/ADFG

Bear Conservation in Mexico

Bear Trust International has developed a partnership relationship with the managers of CEMEX Corporation's El Carmen Project in northern Mexico. CEMEX, one of the largest cement companies in the world, owns several hundred thousand acres in the El Carmen Natural Area, and seeks to protect and restore the native flora and fauna of Maderas del Carmen Ecosystem in Northern Coahuila, Mexico. Bear Trust and CEMEX are cooperating on a Spanish translation of the *Be Bear Aware* materials for use in northern Mexico. A long-term Mexican black bear research project is ongoing and offers partnership opportunities for Bear Trust.

PROJECT SUMMARY REPORT

Conservation Projects Funded in 2010-2011

Project # **2011-01**
Project Title: Conservation and Education in Alleghany County, Virginia
Project Description: Bear Trust completed the final phase of our comprehensive conservation and education project in Alleghany County, VA. Education Items: materials for onsite education programs and 60 free copies of *The Bear Book ,* as well as free copies of the student's version of the Curriculum Guide to The Bear Book, to students in Alleghany County who are participating in the pilot study. Conservation Items: Bear-resistant containers and dumpsters for the project site.

Project # **2011-02**
Project Title: Conservation, Research, and Education in Colorado
Project Description: This grant helped pay for GPS collars for research bears. Field work for this project began May 1, 2011 and will continue until 2015. The Colorado Project also includes an education component, which will be led by Bear Trust International over the next several years.

Project # **2011-03**
Project Title: Bear Essentials: Education Program Based on Bear Research
Project Description: Bear Trust used this grant to begin developing a new education program based on wild bear research. This program is targeted for students in grades K-12, with age-appropriate lessons for each age group. All lessons meet National Science Standards.

Project # **2011-04**
Project Title: Pilot Study in New Jersey
Project Description: Bear Trust used this grant to begin an education program for 1,000 high school students in Sussex County, New Jersey. These 1,000 students will participate in our new "sister city" project with at least 500 students in Anchorage, Alaska.

Project # **2011-05**
Project Title: Curriculum Guide to The Bear Book
Project Description: In 2011, Bear Trust completed final editing, formatting, and printing of the Curriculum Guide to The Bear Book. We developed partnerships with organizations in Alaska and New Jersey to conduct the pilot study in two sister school districts. We are also working on pilot studies in MT and VA.

PROJECT SUMMARY REPORT

Conservation Projects Funded in 2007-2010

Project # **2010-01**
Project Title: Conservation, Research, and Education in NJ
Project Description: This grant helped pay for research, education, and conservation materials for our project in New Jersey. Research items: man power to trap bears and change batteries in collars, field vehicle and gas, and immobilization drugs, and manpower to analyze bear movement data. Education items: stipend for one year for a master's student and stamps for delivering the second round of the human dimensions survey.

Project # **2010-02**
Project Title: Curriculum Guide to *The Bear Book*
Project Description: In 2010, Bear Trust completed the development of the Curriculum Guide to *The Bear Book.* The goal of the Curriculum Guide is to provide a way for teachers to help hone math, science, and reading comprehension skills for U.S. high school students. In addition, we are using *The Bear Book* to introduce and/or enhance information on bear conservation. Bear Trust is currently working on a pilot study to test the efficacy of using *The Bear Book* and the Curriculum Guide as teaching resources in the classroom.

Project # **2010-03**
Project Title: Conservation and Education in Alleghany County, Virginia
Project Description: Bear Trust worked on this comprehensive conservation and education project in Alleghany County, VA. Education Items: materials for onsite education programs and 60 free copies of *The Bear Book ,* as well as free copies of the student's version of the Curriculum Guide to The Bear Book, to students in Alleghany County who are participating in the pilot study. Conservation Items: Bear-resistant containers and dumpsters for the project site.

Project # **2009-01**
Project Title: Conservation, Research, and Education in NJ
Project Description: This grant helped pay for research, education, and conservation materials for our project in New Jersey. Research items: man power to trap bears and change batteries in collars, field vehicle and gas, and immobilization drugs, and manpower to analyze bear movement data. Education items: stipend for one year for a master's student and stamps for delivering the second round of the human dimensions survey.

PROJECT SUMMARY REPORT

Conservation Projects Funded in 2007-2010

Project # **2009-02**
Project Title: WOW: Outdoor Resources Network
Project Description: Bear Trust is proud to be a founding supporter of the Wonders of Wildlife "Conservation and Environmental Education Network ". This exciting and comprehensive online program will bring wildlife information directly into classrooms as well as provide teachers with access to over 3,000 conservation programs nationwide. This program is still in the developing stage but can be viewed at: http://www.outdoorresource.org/.

Project # **2009-03**
Project Title: American Wildlife Conservation Partners: White House Conference on North American Wildlife Policy
Project Description: Bear Trust was a major sponsor of the 2008 White House Conference on North American Wildlife Policy held in Reno, Nevada. During the conference, the American Wildlife Conservation Partners developed *Wildlife for the 21st Century*, a list of recommendations to the president. At the conference, vice president (at the time) Dick Cheney was the guest speaker.

Project # **2009-04**
Project Title: 10th Annual Black Bear Workshop
Project Description: Bear Trust sponsored the 10th Annual WBBW held in April, 2009 in Reno, Nevada. Bear Trust also presented a research poster on the research component of our Montana Project.

Project # **2009-05**
Project Title: Wildlife Day and Earth Day Community Events
Project Description: Bear Trust participated in two community events in Missoula, MT to increase public awareness about bear conservation.

Project # **2008-01**
Project Title: Wonders of Wildlife: Outdoor Resource Network
Project Description: Bear Trust is proud to be a founding supporter of the Wonders of Wildlife "Outdoor Resource Network". This exciting and comprehensive program will bring wildlife information directly into classrooms as well as provide teachers with access to over 3,000 conservation programs nationwide.

PROJECT SUMMARY REPORT

Conservation Projects Funded in 2007-2010

Project #	**2008-02**
Project Title:	Conservation and Education in Alleghany County, Virginia
Project Description:	Bear Trust initiated the first phase of this project by installing five 4-yard wildlife-resistant dumpsters in the George Washington National Forest near Covington, VA. Bear Trust also commissioned and purchased signs to be placed at the project site. The signs provide education about human responsibilities in bear habitat, as well as acknowledge donors to the project.
Project #	**2007-01**
Project Title:	Clam Lake, Wisconsin Adopt-a-Dumpster Demonstration Project
Project Description:	Bear Trust paid to purchase and ship 11 three-yard, bear-resistant dumpsters for the Clam Lake area of Wisconsin's Chequamegon-Nicolet National Forest as part of the Bear Trust Adopt-a-Dumpster Program.
Project #	**2007-02**
Project Title:	University of Kentucky Department of Forestry: Black Bears and Roads Research Project
Project Description:	This grant paid for gas and equipment for a graduate student to conduct a study on black bear movements relative to highways in Kentucky's Cumberland region.
Project #	**2007-03**
Project Title:	University of Montana: Rattlesnake Black Bear Research Project
Project Description:	This is a research project to study the impact development in the Rattlesnake River area of western Montana related to black bears and is part of Montana's Living with Wildlife program.
Project #	**2007-04**
Project Title:	International Association for Bear Research and Management: The Bear Conservation Fund
Project Description:	This is the third year Bear Trust has supported this IBA effort to raise $1.5 million over three years to fund projects and programs that the world's leading bear biologists have agreed are essential cornerstones to address the priority conservation needs of the world's bears.

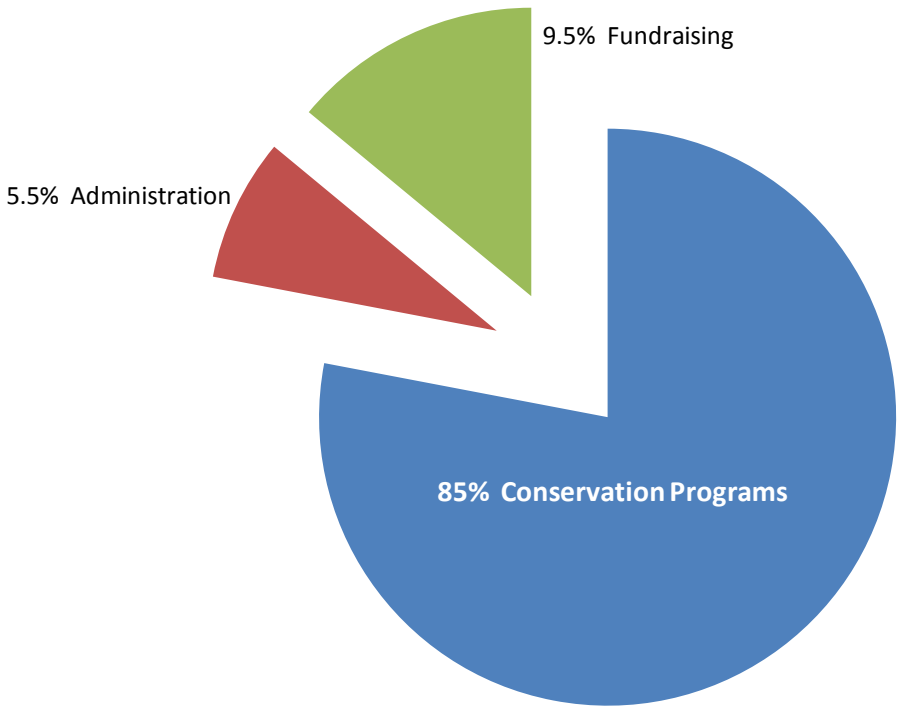
PROJECT SUMMARY REPORT

Conservation Projects Funded in 2007-2010

Project #	**2007-05**
Project Title:	19th Eastern Black Bear Workshop
Project Description:	Bear Trust sponsored the workshop on April 10, 2007.

Project #	**2007-06**
Project Title:	Wonders of Wildlife: Conservation Education Portal
Project Description:	Bear Trust has contributed to this online/media education program with several other conservation NGOs to help bring wildlife and conservation directly into the classroom through interactive media.

FINANCIAL OVERVIEW and BOARD



Bear Trust's program expense ratio averages over 85%, which exceeds the Better Business Bureau's Wise Giving Alliance Standards for Charity Accountability (charitable organizations should spend at least 65% of expenses on program activities).

BEAR TRUST BOARD

Board Chairman and Treasurer: A. C. Smid

President: Gilbert Adams

Secretary: Derek Craighead

Board Members: John Chaney, Geoff Pampush

Executive Director: Melissa Reynolds-Hogland

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