

PREDATORS

AND THE FUTURE OF CONSERVATION



Bring up the topic of predator management at a coffee house today and you're bound to get an earful. A question like, "should we use regulated harvest to help keep predator populations in balance?" can incite vehement horn ramming among different groups, which all too often distracts from—and sometimes derails—effective wildlife conservation.

So, how do we change this? How do we pave the way for the voting public and other decision makers to tackle tough, controversial issues like predator management in ways that are progressive and beneficial to conservation? One thing we can do is begin changing the focus away from emotion-based arguments and towards evidence-based discussions. We can ground everything in science. And we can focus efforts on our youth. They are our future decision makers and leaders. We need to teach our youth that science and hunting play important roles in effective wildlife conservation under the North American Model of Wildlife Conservation.

This is exactly what Bear Trust International has been doing for the past five years. In partnership with state wildlife agencies like Montana Fish, Wildlife and Parks and co-funded by individuals, conservation organizations, and foundations including Wildlife Management Institute, Wild Sheep Foundation, the William H. Donner Foundation, and Safari Club International Foundation, Bear Trust has authored the *Student Scientist Series*, a suite of conservation-education programs that tackle thorny issues like: Are grizzly bears ready for delisting? Should we hunt wolves to help keep their numbers in balance?

Bear Trust's approach is simple. We ground all of our education programs in science, and we bolster programs with real-world data. We also use a "flipped learning model"—instead of lecturing to our youth (yawn), we provide opportunities for youth to become wildlife scientists who evaluate different conservation issues by looking at the scientific data.

WOLVES

For example, what does the scientific data say about gray wolves? The wolf data from the U.S. Fish and Wildlife Service is clear: wolves in the northern Rocky Mountains met delisting criteria in year 2004. However, most of our high school youth don't know this fact. And this is no surprise when you consider how the wolf issue has played out in the courtroom and in the media. With the highly publicized litigations over delisting, relisting, delisting, relisting again and again, many people forgot to just stop and take a look at the data. Many people forgot that the goal of the Endangered Species Act is to recover listed species to the point that federal protection is no longer needed and management of the species can be returned to state wildlife agencies. The ESA was not designed to keep a species listed indefinitely.

Bear Trust believes it is important to teach our youth to press pause, and take a look at the data. We need to teach our kids critical thinking skills so they can distinguish between emotion and evidence-based information, which will reap enormous conservation rewards as our youth transition into the voting public.

The goal of the ESA is to recover a listed species to the point that federal protection is no longer needed and the management of the listed species can be returned to state wildlife agencies. The ESA was not designed to keep a species listed indefinitely.

As part of Bear Trust's new wolf education program *Gray Wolves in the Northern Rocky Mountains: A Conservation Puzzle*, high school students take a good, long look at the real-world data. When did gray wolves in Idaho, Montana, and Wyoming meet delisting criteria? Look at the data. How many cattle and sheep have been depredated by wolves? Look at the data. Has regulated wolf harvest and incident-response management helped reduce the number of livestock depredations? Look at the data. Have wolves decimated ungulate populations? Look at the data. How widely have wolves expanded their geographic range? Look at the data.

Of course, with wolves it's more complicated than just looking at data. The wolf issue can be so controversial, in part, because there are so many different stakeholders, and each stakeholder holds its own set of values. To ensure our wolf education program is balanced and unbiased, Bear Trust collaborated with a wide range of stakeholder groups to make certain that each stakeholder perspective is

Gray Wolves in the Northern Rocky Mountains
A Conservation Puzzle

Check it out for yourself! All materials are free. Here's where you can find the introductory video: beartrust.org/gray-wolves-in-the-northern-rockies.

accurately and evenly represented. Bear Trust sat down with anti-wolf groups, pro-wolf groups and groups in between, including hunters, ranchers, wilderness advocates, Native Americans, wolf-watching ecotourism representatives, and wildlife managers. As a result of the painstaking work to ensure balance and accuracy, all partners (anti-wolf, pro-wolf, and partners in the middle) have endorsed our wolf-education program.

GRIZZLY BEARS

What about grizzly bears? Are grizzly bears in the Greater Yellowstone Ecosystem ready for delisting? To answer this question, we should look at the data. Admittedly, this is sometimes easier said than done, partly because it can be tough to find the data. So, Bear Trust did the leg work for you. We pored through 30 years of U.S. Fish and Wildlife Service annual reports and tracked down the data we need to determine whether grizzly bears

are ready for delisting. We learned that there are three delisting criteria that grizzly bears in the Greater Yellowstone Ecosystem must meet. We put all data pertinent to the three delisting criteria into easy-to-read tables. We even graphed the data so you can see for yourself when this grizzly bear population met delisting criteria.

As an example, check out delisting criterion No. 1. Here's what it states:

"In the Greater Yellowstone Ecosystem, the grizzly bear population must maintain a minimum of 48 adult females with cubs. This number cannot fall below 48 for [two] consecutive years. The total population of grizzly bears must not fall below 500 for two consecutive years."

Therefore, there are two requirements for delisting criterion No. 1:

- there needs to be at least 48 female grizzly bears with cubs,
- there needs to be at least 500 total bears in the population.

Grizzly bear scientists have been collecting data on the Yellowstone grizzly bear



With wolves it's more complicated than just looking at data. The wolf issue can be so controversial, in part, because there are so many different stakeholders, and each stakeholder holds its own set of values.



TITLE: PREDATOR MANAGEMENT

REVISED DATE: SEPTEMBER 27, 2016

BEAR TRUST'S EDUCATION PROGRAMS ALIGN WITH B&C'S PREDATOR POSITION STATEMENT

SITUATIONAL OVERVIEW:

Accommodating and maintaining appropriate populations of predator species such as wolves, bears, cougars, and coyotes, is one of the most complex issues in North American wildlife conservation today. These predator species exist near or at the top of ecosystem food chains. They have few natural predators themselves, so their numbers are dictated primarily by available food, suitable habitats, and human-caused mortality. As a result, where their prey exists in abundance, predator populations have potential to attain high numbers that brings them into conflict with humans and management goals for other native wildlife species.

Unlike other mammals, predators are efficient killers of a wide range of prey species, including domestic livestock, family pets, and even humans in rare cases. These conflicts are on the rise as predator populations increase in shared habitats. Wolves and grizzly bears are expanding and dispersing into new areas, many of which are occupied by people. Cougars are also recolonizing areas where they have not recently occurred, and the coyote is now found in all of the Lower 48 states, Alaska and throughout Canada. People who live in landscapes with predators often support their existence and tolerate their presence, but want their numbers managed to mitigate impacts on native wildlife populations, their livelihoods, personal safety and the safety of their pets and livestock. Other people strongly feel that predators should be left alone and not managed by humans in any way.

These differing views have led some people to use legislative and legal methods to support their positions, such

as seeking indefinite protection for predator species under federal laws like the Endangered Species Act. Many are disregarding or manipulating relevant scientific findings to block state/provincial management of predators, including the elimination of hunting as a proven and reliable form of management. In promoting the conservation of wildlife and its habitats, especially big game, the Boone and Crockett Club is concerned with philosophies or actions that would inhibit the successful conservation and management of large predators and the prey species upon which they rely.

POSITION:

The Boone and Crockett Club supports maintaining viable populations of all wildlife, including predators, where naturally occurring, legally reintroduced, or established through natural range expansion. Management models for predator conservation should take a landscape perspective that embraces wilderness areas where these species can exist with minimal human influence, as well as multiple-use landscapes where interactions with humans will be more common and management of predator numbers will be required. The needs of human communities and enterprise must be conscientiously considered in formulating wildlife policies in shared human-wildlife landscapes. This is not the same as being anti-predator; rather it is a means of finding a way for predators and human communities to co-exist.

The Club believes the best conservation outcomes for predatory species will be achieved by following a proven and balanced model of wildlife conservation that is supported by active management of ecosystems and science-informed decisions. This includes sustainable, regulated hunting as an acceptable method for predator management, where and when justified. One example would be where predator numbers are threatening existing conservation programs for other species.

The complex nature of ecosystems, including the behavior and ecological requirements of predator species themselves, necessitates that decisions be informed, wherever possible, by legitimate, peer-reviewed science. Acquiring and applying knowledge through science-based approaches enables professionally-trained conservation practitioners to improve wildlife policies and test their conservation outcomes in ways that popular opinion does not. This is what distinguishes professional wildlife managers—they rely on science to focus on what is good for predators and prey—as well as manage the expectations and needs of the people who live near these species.

The Club supports the Endangered Species Act of 1973, as amended (ESA) and encourages the use of preservation and protection methods as tools of conservation where necessary and appropriate to render a species no longer in danger of extinction. The Club opposes misuse of the ESA to achieve indefinite protection and block management of predatory species when strong scientific evidence demonstrates listing is not warranted or population recovery goals have been met. The Club also rejects the argument that an ESA delisting of a predator species will result in excessive or indiscriminate harvest because of the fact professional wildlife management of delisted species will continue and ensure they are not re-listed.

In the Club's view, the most significant factor influencing the conservation and future of predatory species will not come from new laws or court decisions, but from obtaining support from those who are most affected by the existence of predators—namely, those who live closest to them.

READ ALL 17 OF BOONE AND CROCKETT CLUB'S POSITION STATEMENTS ONLINE AT WWW.BOONE-CROCKETT.ORG

population since at least 1983. So, all we have to do is take a look at the data and see if Yellowstone grizzlies met delisting criterion No. 1.

Since there are two requirements for the first criterion, we created two graphs using the real-world data. Graph No. 1 shows how many female grizzly bears with cubs there were between 1984 and 2014. At first, there weren't that many females with cubs, which was why this grizzly bear population was listed as threatened under the Endangered Species Act. But by year 2000, the number of grizzly bear females with cubs was above 48. The magic number of 48 females with cubs was reached several times after 2000, but it wasn't until 2007 that the number of females with cubs did not go below 48 for two consecutive years (graph No. 1).

The second requirement of delisting criterion No. 1 is reflected in graph 2, which shows the number of grizzly bears in the Yellowstone population between 1990-2014. At first, the number of grizzly bears was low, which was why this population was listed as threatened. However, by year 2007, the grizzly bear population grew to over 500, the magic number. Graph 2 shows that the Yellowstone grizzly bear population met the second requirement of delisting criterion No. 1 in year 2007.

The data are clear. The grizzly bear population in the Greater Yellowstone Ecosystem met requirements of Delisting Criterion #1 in year 2007.

If you look at graphs we made for all three of the delisting criteria for the Yellowstone grizzly bear population (beartrust.org/grizzly-bears-in-yellowstone-proposed-delisting-by-usfws), you will find all the data shout the same thing: Yellowstone grizzly bears met all three delisting criteria in year 2007.

KNOWLEDGE IS POWER

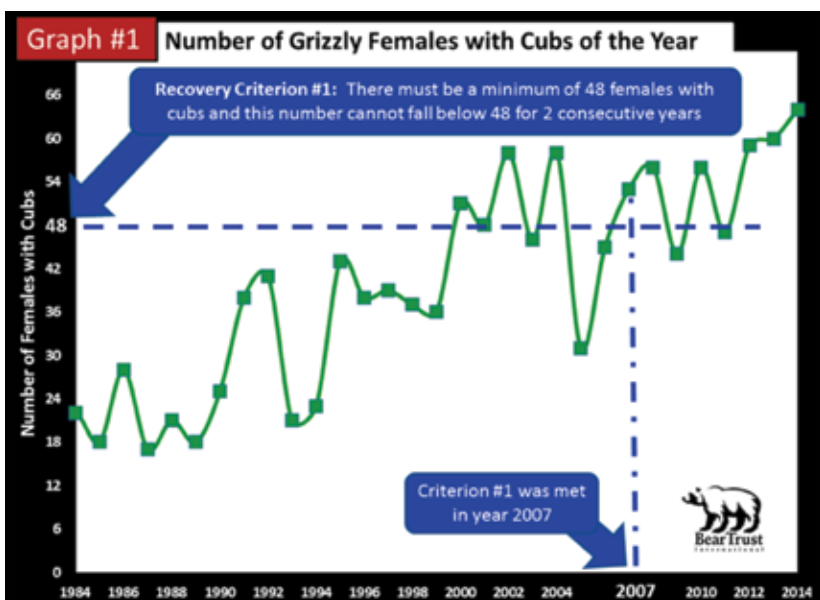
How about we give all this data to our youth and let them use critical thinking skills to determine if grizzly bears in Yellowstone are ready for delisting, based on the data? That's exactly what Bear Trust has done as part of our grizzly bear delisting lesson.

When high school students watch the introductory video, they learn about the three delisting criteria for the grizzly bear population in Yellowstone. After the video, students get their hands on the real-world data, learn how to create graph No. 1 and graph No. 2 (and other graphs), and they interpret the findings. They discover that Yellowstone grizzly bears met all three delisting criteria in year 2007. Ten. Years. Ago. The fact that Yellowstone grizzlies came back from the brink of extinction is a success story we should be celebrating.

As a science-based conservation organization, Bear Trust International fully supports the delisting of the grizzly bear population in Yellowstone. Based on the scientific data, it is time to delist the Yellowstone grizzly bear population, return its management back to state wildlife agencies, and sustainably manage this population for present and future generations.

EDUCATION IS KEY TO EFFECTIVE, SUSTAINABLE CONSERVATION

It's true. Education is key to effective, sustainable conservation. That's why Bear Trust provides important, much-needed conservation education for our youth. Grounded in real-world science, every conservation



Check it out for yourself! All materials are free. Here's where you can find the introductory video: beartrust.org/grizzly-bear-delisting-stem-lesson.





LEUPOLD

**DEDICATED
UNSTOPPABLE
RELENTLESS
AMERICAN TO THE CORE**



It takes tenacity just to get to places like this. Success requires gear that's as tested, ready, and resilient as the hunters carrying it. **That's Leupold®. American to the Core.**

Learn more about the optics and gear that goes where others can't at Leupold.com.

LEUPOLD FULL LIFETIME GUARANTEE

lesson in our Student Scientist Series includes real-world data and teaches youth how to use technology like GPS and GIS to tackle timely, often controversial conservation issues. One of our program goals is to help shape the minds of our future voters by teaching them critical thinking skills. Today's youth will be tomorrow's decision makers. We need youth to understand the valuable roles that science and science-based hunting play in effective wildlife conservation.

Teachers don't need to know anything about wildlife research to use these lessons. Just turn on the introductory video and begin. For ease of use in the classroom, all of our data-rich STEM (Science Technology Engineering Mathematics) lessons are aligned with Next Generation Science Standards. Teachers can check off standards as their students work through the conservation education lessons. All education materials are provided free to educators,

youth and the public thanks to the generosity of conservation-minded individuals, organizations and businesses.

WHO IS BEAR TRUST INTERNATIONAL?

Founded in 1999 by B&C Regular Member A.C. Smid, Bear Trust International is a non-profit organization with a mission to help conserve the world's eight bear species, other wildlife, and habitat. We do this by focusing on science-based education, bear research and management, habitat protection, restoration and enhancement, and conservation policy.

Bear Trust believes that hunting is part of the world's natural heritage and should be used as one of many tools for effective wildlife conservation. Bear Trust values the critical role that science plays in conservation and believes that we have a responsibility to conserve bear populations and their habitats for present and future generations.

Bear Trust is governed by 11 directors on its board, including several B&C Regular and Professional Members: A.C. Smid, Gray Thornton, Marc Mondavi, Tony Caligiuri, James Cummins, Linda Demmer, Denis Dale, John Chaney, Gilbert Adams, Mike Evans, and Jeff Watkins.

A FEW PROGRAM HIGHLIGHTS

Bear Trust has successfully authored nine innovative, science-based conservation education programs as part of its signature Student Scientist Series, which have been used by more than 50,000 youth. In terms of habitat conservation, we've worked collaboratively with the Mississippi River Trust, Mississippi Land Trust, and the Lower Mississippi River Conservation Committee to restore, enhance, and protect 53,000 acres of habitat for black bears and other wildlife. Our research on black bears was recently published in the *Journal of Applied*

Ecology and our PhD student recently presented research findings at the Ecological Society of America conference, the International Association of Bear Research and Management conference, and at a TED Talk. In Montana, Wisconsin, Virginia, and New Jersey, we've worked to minimize human-bear conflicts through education outreach and by helping communities become bear-resistant. Internationally, we are doing research on sloth bears and working to save lives of humans and sloth bears in Gujarat, India, working to help conserve sun bears in Sumatra, and helping to minimize human-brown bear conflicts in Abruzzo, Italy. Finally, Bear Trust's founder and board chairman, A.C. Smid, was recognized for his outstanding contribution to conservation by being selected as one of six finalists for the prestigious 2016 Beretta and Safari Club International Foundation Conservation Leadership Award. ■

Today's youth will be tomorrow's decision makers. We need youth to understand the valuable roles that science and science-based hunting play in effective wildlife conservation.



Check out one of our introductory videos at: beartrust.org/student-scientist-series.

Want to learn more about our programs or find out how you can participate? Visit us at beartrust.org, email info@beartrust.org, or call us at (406) 523-7779.

©JAMES L. CUMMINS