



Bear Management Update

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Fish and Wildlife Conservation Commission, June 2016



Overview

- Background and Context
- Population and Habitat
- Human-Bear Conflicts
- 2016 Bear Hunt



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Bear Management Plan

- 4 Conservation Focus Areas:
 - ✓ Population Management
 - ✓ Habitat Conservation
 - ✓ Human-Bear Conflict Management
 - ✓ Education and Outreach



The Florida Fish and Wildlife Conservation Commission (FWC) developed a 10-year management plan (approved in 2012) that guides the Bear Management Program. The plan guides everything we do for bears in Florida, including policies, rules, and actions, and helps FWC with annual work plans and progress assessment. The plan is considered a statewide framework that will facilitate managing bears with increased local input and participation. The goal is to maintain sustainable bear populations in suitable habitats throughout Florida for the benefit of the species and people.

Bear Program Overview

- Habitat Conservation
 - ✓ Wildlife Management Areas and other public conservation lands
 - ✓ Connectivity via underpasses and greenways
 - ✓ Agency commenting on land use
- Population Management
 - ✓ Bear demographic studies
 - ✓ Monitor mortality
 - ✓ Statewide population assessments and range update
 - ✓ Hunting as management tool
- Human- Bear Conflict
 - ✓ Remove bears that pose public safety threat
 - ✓ Attractant management (garbage)
 - ✓ Feeding rule and penalties
 - ✓ Depredation permit option
- Education and Outreach
 - ✓ Partner with local communities
 - ✓ Website and materials
 - ✓ Bear curriculum

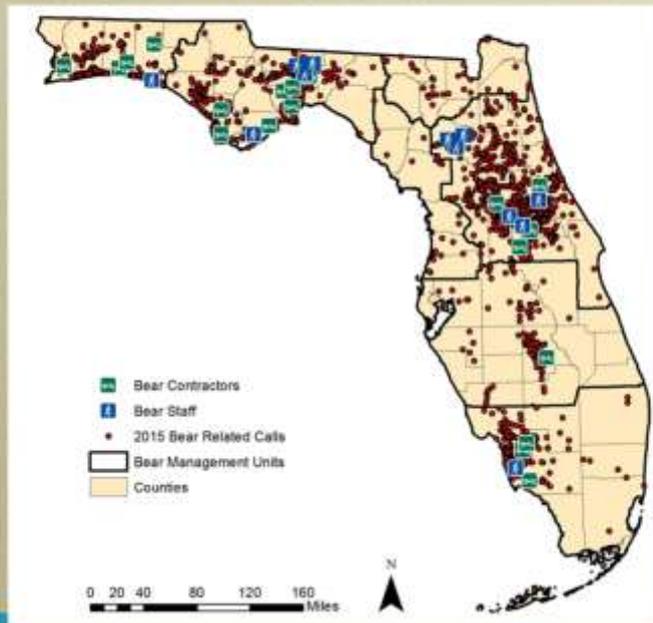


The FWC is responsible for managing bears in Florida. The overall approach is multi-pronged and focuses on maintaining bear populations at healthy levels while ensuring public safety, use, and enjoyment of the bear resource.



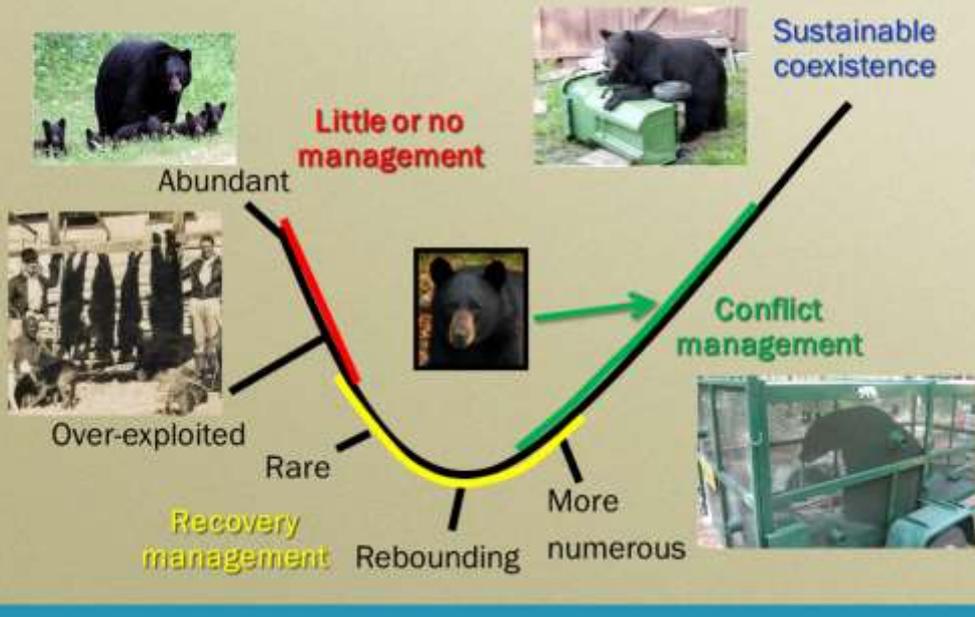
This map shows bear range and the Bear Management Units (BMU) where we are tailoring bear management issues and solutions at the local level.

Bear Staff in Florida



This slide shows the location of FWC bear staff and contractor resources in Florida.

Bear Management Evolution



All bear management elements discussed today fit into the larger context of an evolving bear conservation situation and how to move further into sustainable coexistence for both bears and people.

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2016 Range Update

- Management and Research Captures
- Research tracking locations
- Documented mortalities
- Bear-related calls
- Hair Snare Hits
 - 2002 = 1.2 million acres
 - 2015 = 10.9 million acres
- Public Sightings

Thank you very much for your participation in this survey. Your contribution to this effort is important to bear conservation and management in Florida!

1. You can drag the red location marker to a larger size to determine coordinates or enter latitude and longitude coordinates directly to locate the map. Please use the "x" and "y" buttons to open the map to fit as possible and precise as location.
2. You can change the background with the button at the top right of the map. (Note: you can hover the mouse over satellite map and street maps to see the satellite images with roads and places labeled.)
3. Enter the date you observed the bear or bear track, or encounter or hair snare.
4. Enter the many other data observed with the routine during the report. If any.
5. Don't forget to click Submit!

Bear Sighting Entry

Latitude: Longitude:
(decimal or degrees) (decimal or degrees)

Sighting Type:

Date of Sighting:

Number of Adult Bears Observed:

Number of Cubs Observed:

First Sighting: Last Sighting:

Your Email:

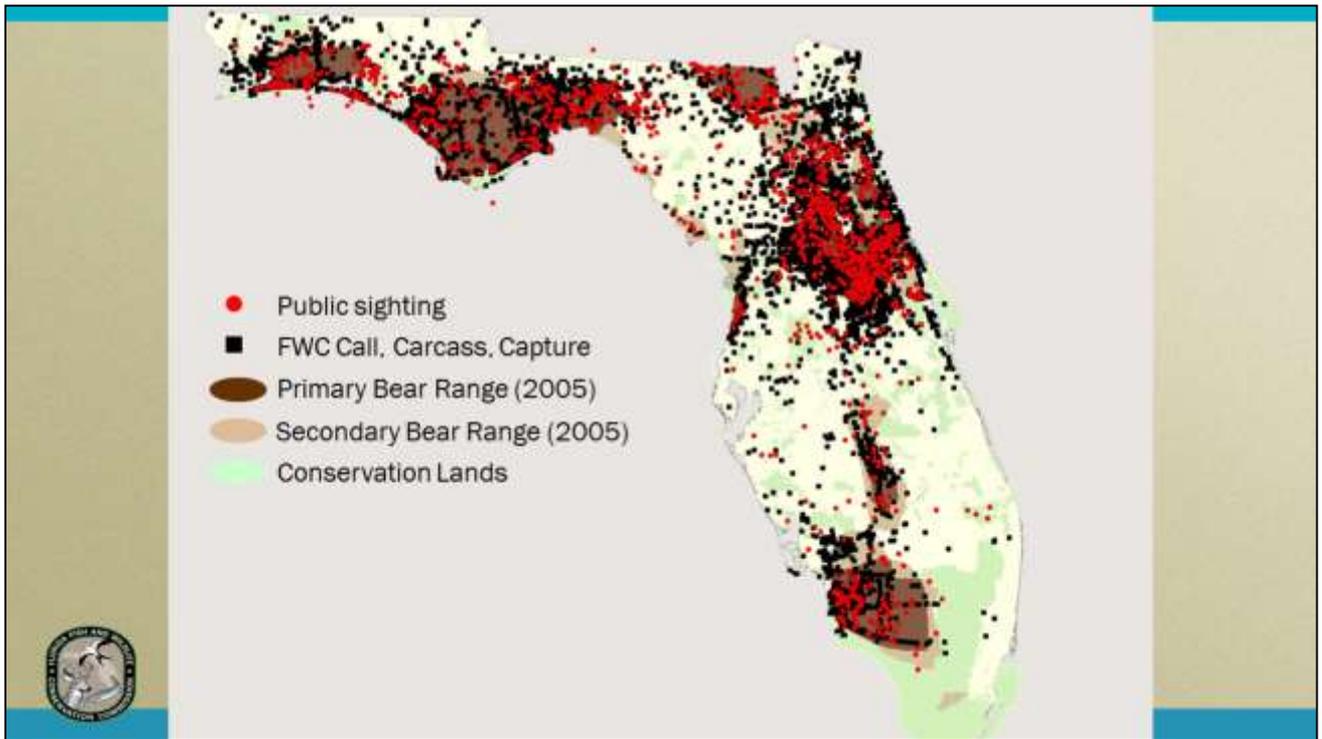
Comments:

Submit Photos (Maximum Photo Size: 10 MB)
Upload Photo:

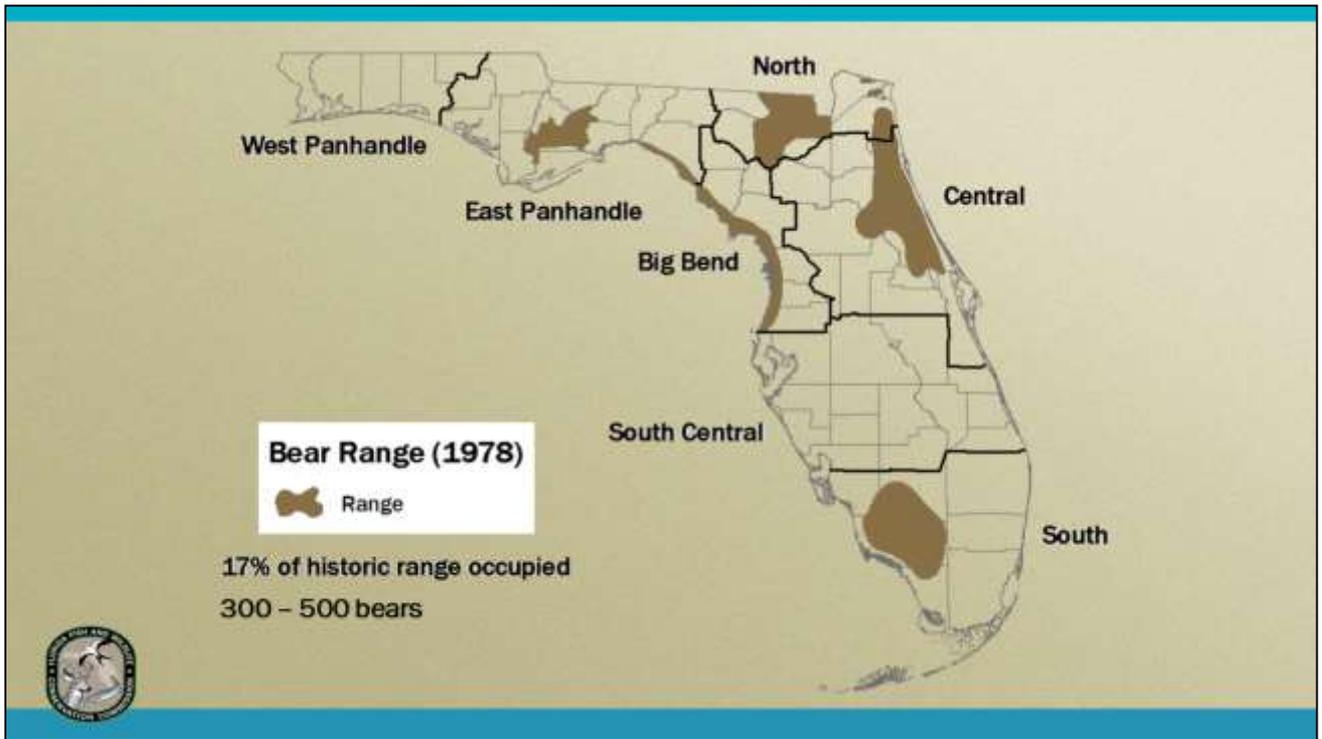
Latitude of center of map:



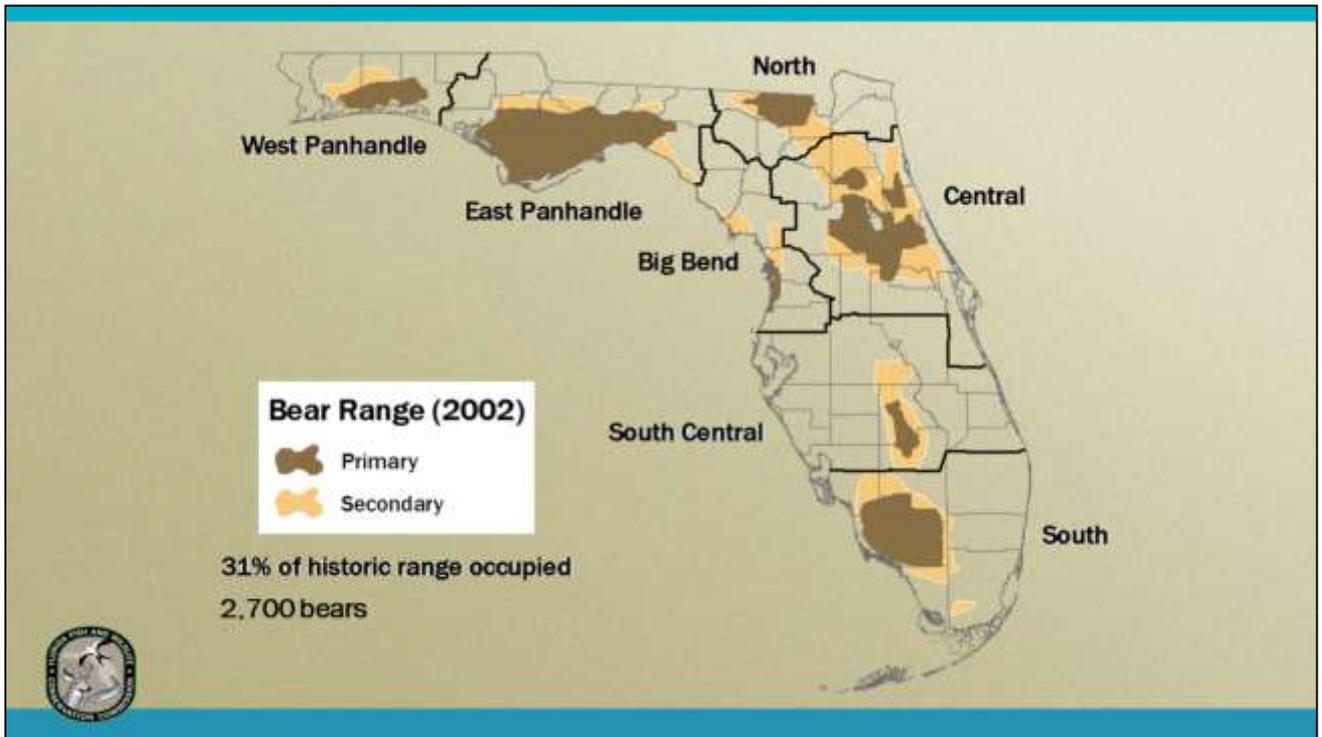
Recently, the FWC has updated bear range maps in Florida. We used data from captures, research tracking, calls, vehicle strikes, hair snares, sightings from the public, and public input from photos and encounters with bears. The newer information from hair snares and public sightings were helpful in filling some gaps in our information



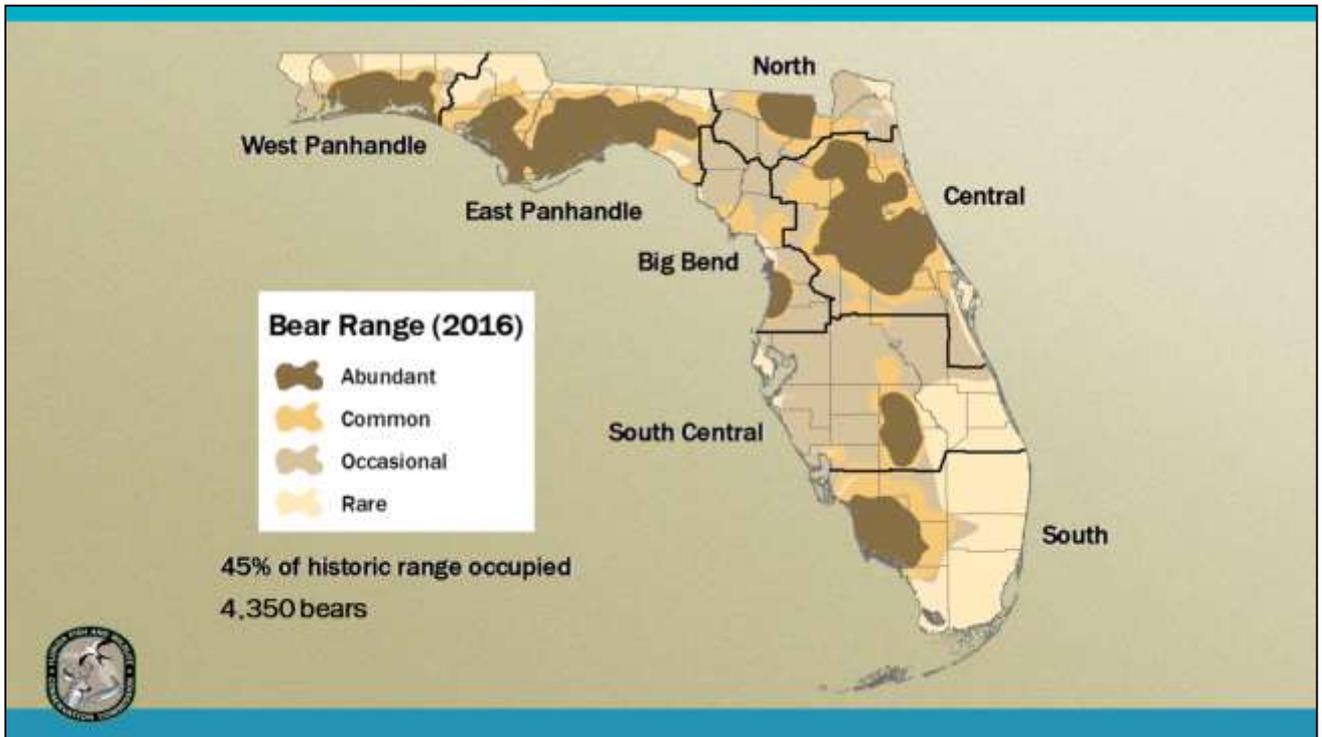
This slide shows a map of the call, capture and carcass data in black, coupled with public sightings in red. These sightings helped us create updated range maps.



In the late 1970's, an estimated 300-500 bears occupied approximately 17% of their historic range.



In 2005, an estimated 2,700 bears occupied approximately 31% of their historic range. At that time, we divided bear range into 2 categories: primary range was occupied bear range with evidence of consistent reproduction or presence of females and cubs; and secondary range was occupied bear range where bears are consistently found, but evidence of reproduction or females and cubs is inconsistent.



Today in 2016, an estimated 4,350 bears occupy approximately 45% of their historic range. Rather than using primary and secondary range, we divided the state into 4 categories based on how frequently bears occur throughout Florida.

- Abundant areas are those with the highest density of data points on bears (e.g, captures, sightings, locations), indicating bears are spending a considerable amount of time in these areas. This corresponds well with our former primary range.
- Common areas are the second highest density areas, and these areas are where bears are spreading from their core areas and spending a fair amount of their time in these areas. This corresponds well with our former secondary range.
- Occasional areas are parts of the state where bears occur irregularly, but their presence is not unexpected given the proximity to abundant and common areas.
- Because bears have been seen in nearly every part of Florida at some point, we categorized the rest of Florida as rare areas.

Habitat Conservation

Bear Management Unit	Area of Potential Bear Habitat in Conservation Lands (acres) in 2015	Percent Change 2012 to 2015
West Panhandle	743,910	+2.9%
East Panhandle	1,250,987	+1.7%
Big Bend	481,085	+0.6%
North	423,419	+2.9%
Central	1,372,818	+4.8%
South Central	928,283	+5.1%
South	1,196,060	+1.9%
TOTAL	6,396,561	+3.0%

≈186,300 acres conserved



The FWC has worked with partner agencies, stakeholder groups, and private landowners to get more bear habitat into conservation through a variety of methods. Statewide, we have seen an increase in the amount of acreage of potential bear habitat that is in conservation, in both public and private lands, since 2012.

Population Size Update



The FWC has partnered with the University of Tennessee to develop updated population size estimates for bears across Florida. The preliminary results are encouraging, with significant increases in bear numbers statewide as compared with estimates for 2002. Dr. Joe Clark will report in more detail on this work.

- Placeholder for Dr. Clark's slides on hair snaring and population modeling work



Apalachicola Demographic Research

- Starting in Summer 2016
- Collaring females, locate dens
- Litter size
- Cub, yearling, & adult survival



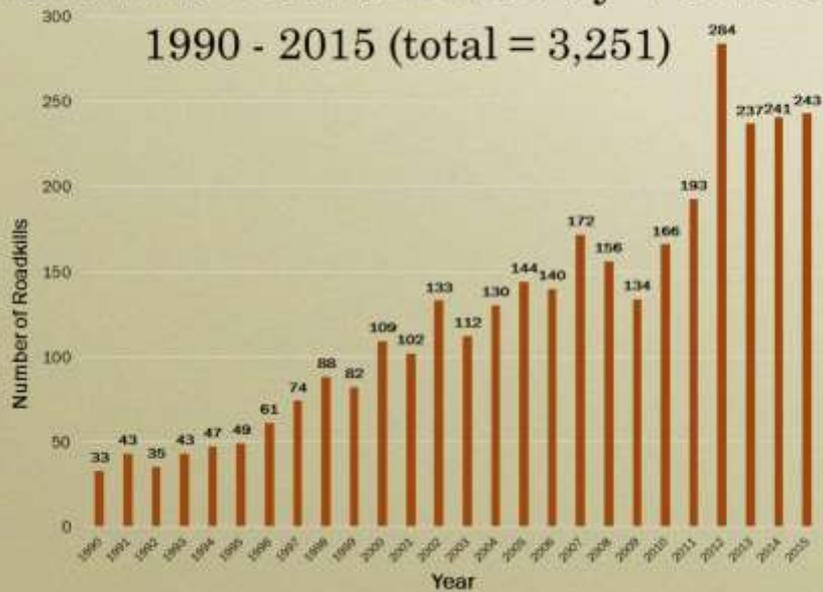
Starting in the summer of 2016, FWC has initiated a research project to learn more about the bear population in the East Panhandle BMU, living in and around the Apalachicola National Forest. Staff will be catching and tracking female bears using GPS collars, locating their dens, and monitoring litter size as well as cub, juvenile, and adult survival. This project is scheduled to be completed in 2019.

Overview

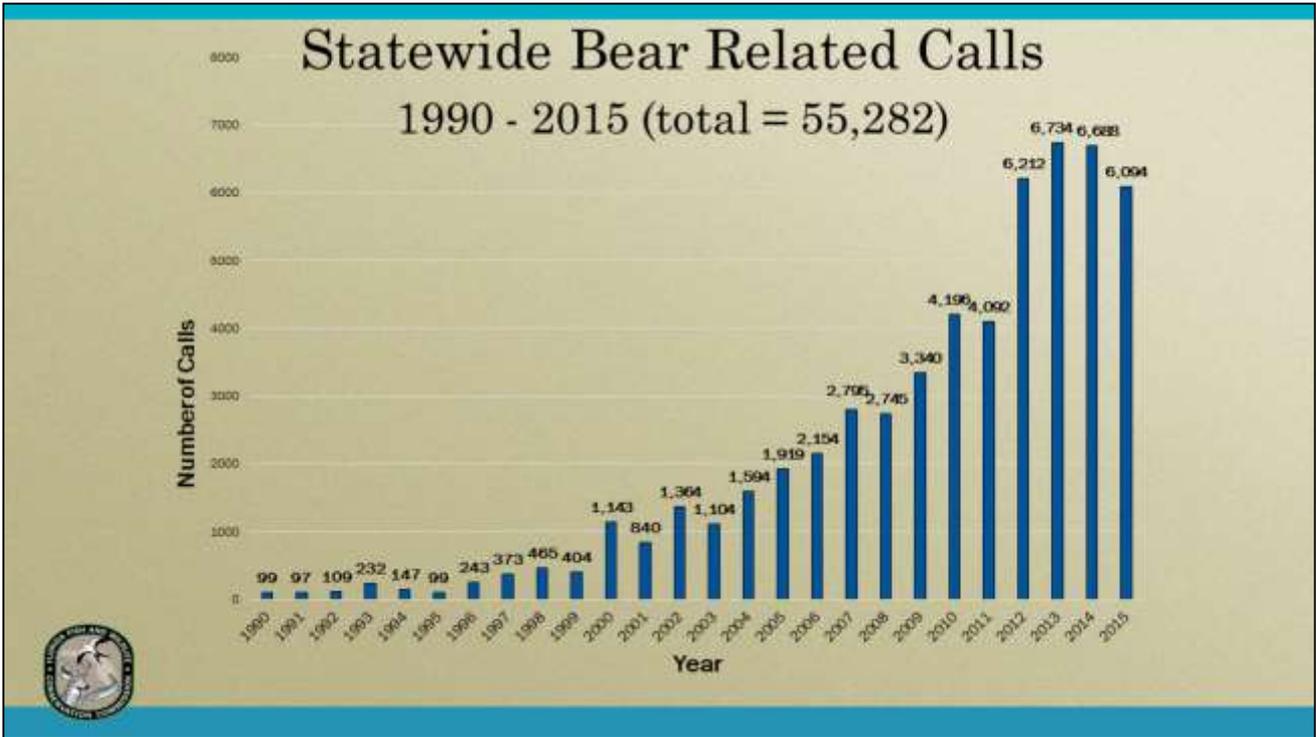
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Statewide Bears Killed by Vehicles



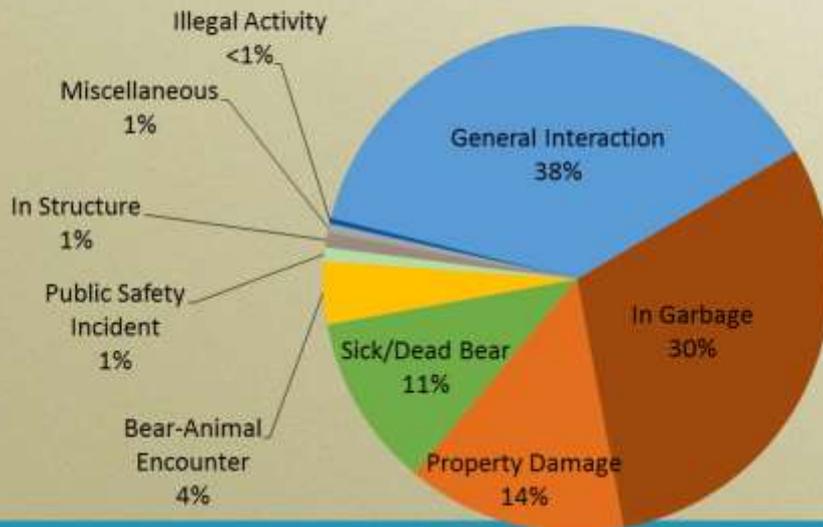
Vehicle strikes have trended upwards since the 1990's, with a spike in 2012 followed by consistently high numbers over the past three years. These collisions impact both bears and people, with significant property damage and human safety issues for motorists.



There also has been a large increase in calls from the public over time, with annual fluctuations in call volume largely driven by natural food availability.

Statewide Reasons for Calls

1990 - 2015 (total = 55,282)



While the number of calls have continued to increase over time, the reasons for the calls and how much of the overall volume they account for, has remained fairly constant over the years. Almost 70% of all the calls received by FWC about bears concern bears being attracted into human use areas, typically getting into the trash or other human-provided foods, which is usually the reason for the bear being in the area. If left unaddressed, these situations slowly escalate into more serious interactions that can result in livestock and pets being injured or killed and even in serious human injury.

Human-Bear Conflicts 2015



This graphic depicts human-bear interactions throughout Florida in 2015. These interactions are greatest where there are large numbers of bears and people living in close proximity to one another.

Management Response

Activity	Recent Average	2016
Calls	1,820	1,553
Captured	47	14
Conflict Killed	25	9
Released	22	5
Euthanized	9	8



Over the past several years, FWC has taken an active approach to bears spending too much of their time in neighborhoods. FWC puts human safety first and any bear that is considered an elevated safety risk is trapped and killed. However, not all bears in human use areas pose an elevated safety risk, so staff assesses each situation and attempts to trap and move into more natural habitats wayward bears. This slide compares management actions for January through early June 2016 with an average for the same period over the past three years.

Bear Feeding Rule Enforcement

Bear Management Unit	July 2015 to May 2016
West Panhandle	17
East Panhandle	21
North	0
Central	122
Big Bend	0
South Central	4
South	23
TOTAL	187



FWC has taken a more aggressive approach to addressing personal responsibility of keeping trash and other items that attract bears into neighborhoods secure. The change in our bear feeding rule included a provision that allows our law enforcement to issue notifications to people who have been in contact with FWC regarding securing their garbage or other attractants but have not yet done so. The notification is a formal reminder that the person's actions are attracting bears, and therefore could be in violation of the law. Often, the notification is enough to change people's behavior without the need to issue a warning or citation.

What is BearWise?

- Active community education and involvement
- Proper garbage handling, securing all attractants
- Ordinances, covenants, or bylaws enforced



BearWise currently is being promoted by both the Northeastern and Southeastern Associations of Fish and Wildlife Agencies as a region-wide initiative, which would result in all citizens east of the Mississippi River being familiar with bear management issues and solutions under one common program. BearWise is a community-wide effort that involves educating all residents and businesses in a specific area, where they know about bears, how to react to encounters with them, and when to contact FWC for assistance. Also, BearWise communities have ordinances or bylaws that require everyone to keep trash and other items that attract bears secure.

BearWise Pioneers

\$220,000 to 12 counties over 10 years

Community	County	Date	Households
Hurlburt Field	Okaloosa	2010	3,500
Wingfield North	Seminole	2014	115
West Seminole	Seminole	2016	40,000



The FWC have been fortunate to have received over \$200,000 from proceeds of the sale of the Conserve Wildlife license plate to provide incentive funds to 12 counties to increase the availability of bear-resistant equipment for their residents over the last 10 years. These incentive funds have helped get three communities to be BearWise, and we continue to work with several more who are in the process of becoming BearWise.

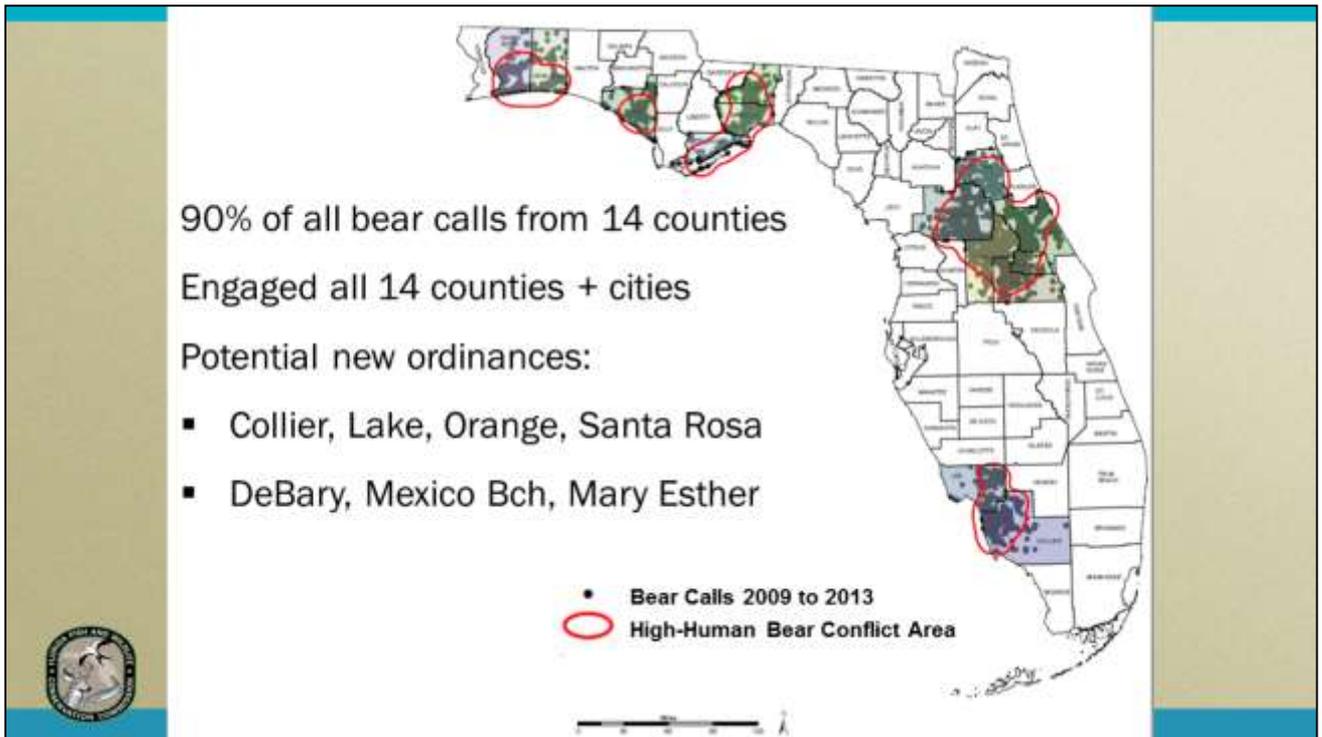
BearWise Funding in FY 16-17

- FY 16/17 received \$825,000 for local governments
 - \$375,000 from bear hunt permits**
 - \$125,000 from State Game Trust Fund**
 - \$325,000 from license plate grant

**60% must go to local governments with ordinances



FWC worked with the Legislature to use funds from the 2015 bear hunt to provide incentive grants to local governments to increase the availability of bear-resistant equipment and BearWise practices. The Legislature approved of the request and added an additional \$125,000 from our State Game Trust Fund for this purpose. The state funds have a provision that requires 60% of the funds (or \$300,000) to be given to local governments with ordinances that require residents and businesses keep their trash and other items that attract bears secure. In addition to state funds, FWC requested and was granted \$325,000 in proceeds from the Conserve Wildlife license plate to match those funds for local governments. The FWC now has a total of \$825,000 to partner with local governments to reduce human-bear conflicts.



The new funding will be used in the 14-county area of Florida with the highest levels of human-bear conflicts. 90% of all of calls in a given year come from these 14 counties. We had been working with many of these counties in the past, and starting in March 2016, we met with each and every one of the 14 counties to tell them about these new incentives and offer assistance with ordinances and any other conflict reduction measures they were interested in pursuing. All of the counties and many cities within those counties have expressed an interest in working with FWC to reduce conflicts.

Working with Waste Service Companies

- National Waste and Recycling Association FL Chapter
- Waste Pro, Inc. from Escambia to Jefferson counties
- Memorandum of Understanding (MOU)
 - Role of the company in reducing conflicts
 - Providing option of bear-resistant equipment
 - Affordable and timely service



In addition to local governments, FWC recognizes that the waste service industry is an important partner in the effort to reduce human-bear conflicts. In this regard, FWC met with the Florida Chapter of the National Waste and Recycling Association, and they are supportive of our efforts to increase availability of bear-resistant equipment. Additionally, FWC met with the Waste Pro, Inc. franchise that covers the panhandle from Escambia to Jefferson counties to see how we could better define how we can work together. We have developed an MOU to be signed soon that states: the company has a role in reducing human-bear conflicts, they will provide the option of bear-resistant equipment, and equipment will be affordable and available in a timely manner.

Bear Program Review

- Seven-Member Expert Panel
 - Dr. Gary Alt
 - Dr. Michael Pelton
 - Dr. David Garshelis
 - Harry Spiker
 - Dr. Craig McLaughlin
 - Jennifer Vashon
 - Colleen Olfenbuttel
- Nation's leading experts on bear research and management
- Over 170 years of professional bear experience and 100's of scientific publications on bears



Recently, the FWC invited a panel of bear experts from across the country to review our bear program, with a focus on the new hunting elements. These experts are the leading professionals in black bear research, management, and conservation, with over 170 years of collective professional experience in bear science. They have authored hundreds of publications on bears.

Bear Program Review

- Excerpts from Conclusion Statement

- “FWC is employing quality long-term data and scientific research to manage Florida’s black bears.”
- “The FWC implemented a responsible, science-based bear hunting plan in 2015.”
- “We recommend that Florida conduct a similar bear hunt in 2016 (with some procedural modifications) . . .”
- “Regulated hunting is an effective tool that is widely used to manage, conserve, and sustain black bear populations . . .”
- “We unanimously concur that hunting is an appropriate response to address human-bear conflicts in Florida, in addition to the conflict-specific mitigation and prevention measures currently implemented by FWC.”



This slide shows the specific findings from the panel. Overall, the panel concluded that the FWC has a sound, science-based bear program and that hunting should remain as an important element of bear conservation in Florida.

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