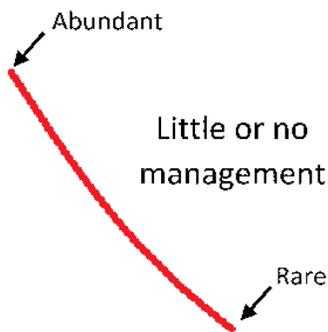


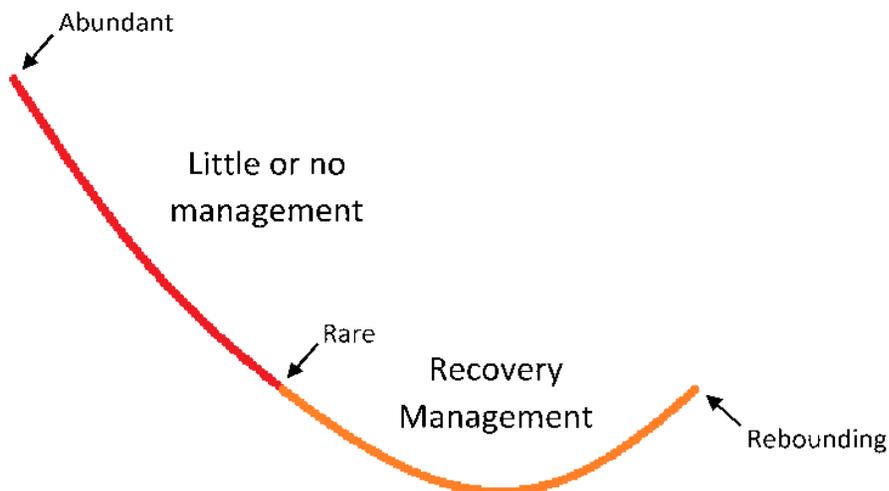
# Bear 101

## Background

Understanding the history of bear populations and their management in Florida helps to provide context to what we are discussing today. This history is explained on a curve to help illustrate changes in the species status and how they were managed over time. In the early centuries, there may have been over 11,000 bears in Florida. As Florida was settled, bears were over-exploited and hunted indiscriminately, which led to the bear becoming rare in the state. With little to no rules or regulations that governed bears or their habitat, bear numbers plummeted.

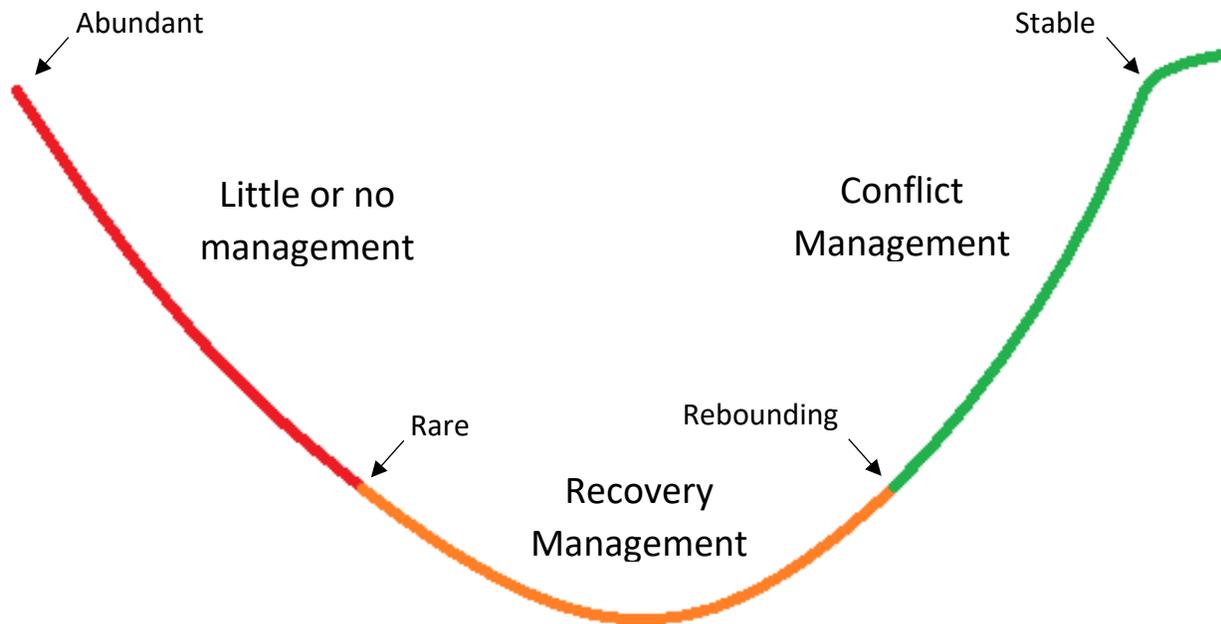


By the mid-1970's, fewer than 500 bears were believed to remain in the state. Fortunately, the state of Florida recognized this, and they listed the bear as a State-designated Threatened species in 1974. This triggered research on threats to bears and what bears need to survive, as well as increased protection and regulations, for both bears and their habitats.



As conservation actions took place, the bear population recovered, with increasing numbers of bears throughout the state. By the early 2000's we estimated there were 2,600 bears in Florida. At the same time, the human population increased in Florida, resulting in more interactions between bears and people. Bear calls to the FWC from the public increased 400% over the last decade, ranging from sightings, to bears in garbage, to more serious incidents involving injuries to people and pets.

In 2010, the FWC revisited the status of all State-designated listed species, and they determined the bear had recovered to the point it was no longer at high risk of extinction. In 2012, the bear was removed from the state threatened list, and as part of that process, the first Bear Management Plan was approved. As FWC moves forward with bear management in Florida, their goal is to maintain a sustainable population of bears in the state while minimizing human-bear conflicts, so that the next stage, **sustainable co-existence**, can be achieved.

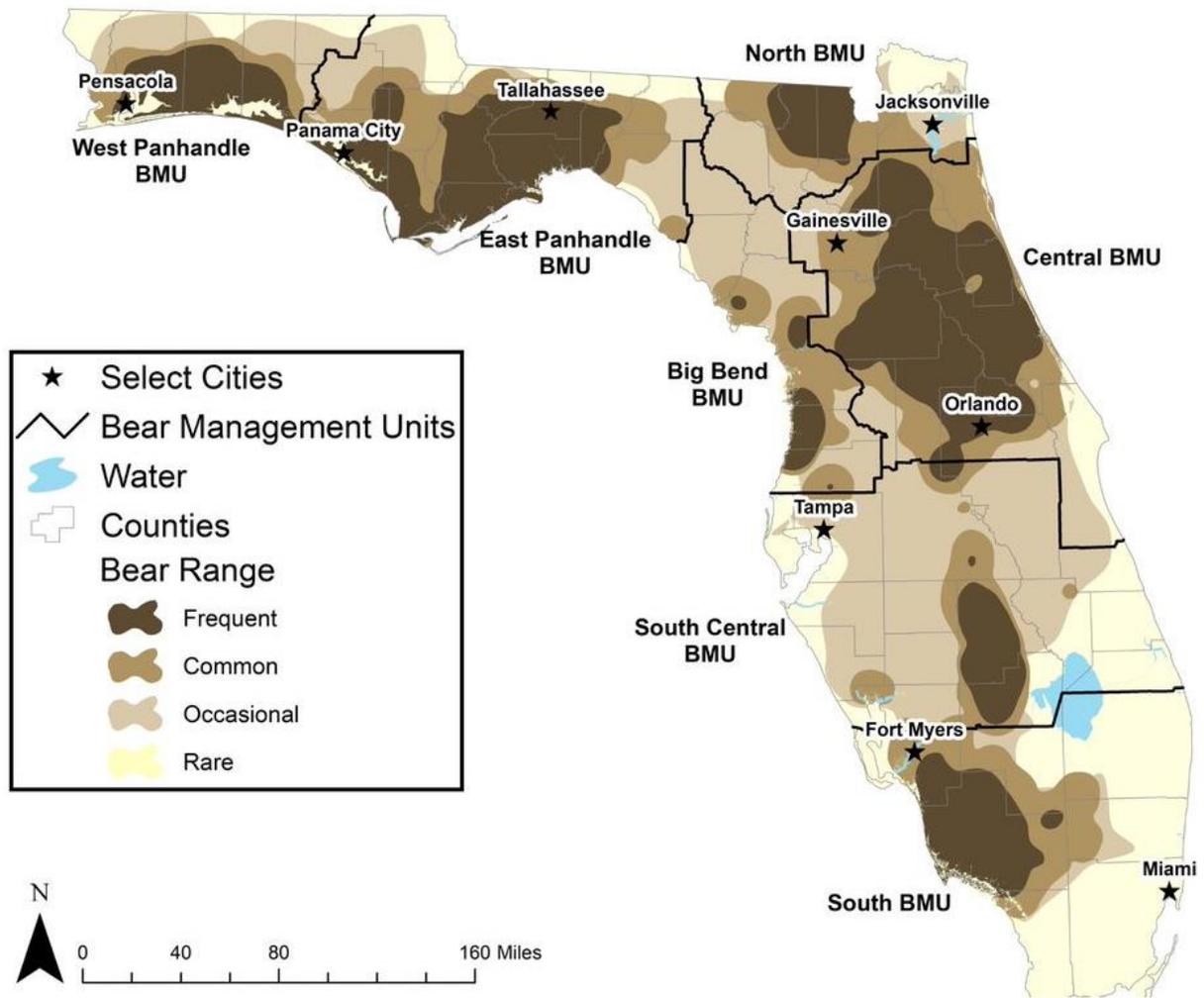


As the bear population increased along with human development, it became more apparent that other management techniques needed to be put into practice. One example is the development of bear-proof trash cans. Bears started wandering into developed areas in search of food and getting into people's trash. These trash cans took away the bears easy source of food and reason to come into developed areas.

## Bear Range

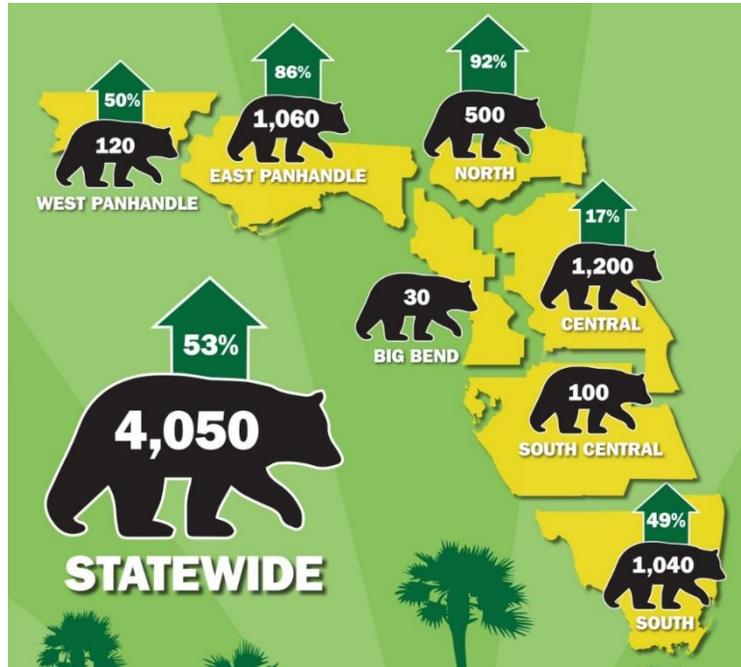
In 2019, FWC estimates that bears occupied 49% of their historic range, which is a strong indication of their successful recovery. Rather than using the primary and secondary range approach, the state was divided into four categories based on how frequently bears occur throughout Florida. Abundant areas 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. These areas of the state correspond well with the primary range delineated in 2005.

Common areas are those with the second highest density of data points, and these areas are where bears are spreading from their core areas and spending a fair amount of time. This corresponds well with the secondary range from 2005. 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, the rest of Florida was categorized as rare areas.



## Abundance

In 2014, FWC initiated the largest scale population estimate for Florida black bears in the state's history. Using the most modern, cutting edge methodology, researchers set up and monitored 824 hair snares to collect 14,960 hair samples from bears in five of the seven BMUs. The research surveyed almost 11 million acres of Florida black bear habitat on both public and private lands. The results were very positive, with a 60% increase in bear numbers statewide as compared to estimates from 2002. Individual BMU populations increased from the 2002 estimates by anywhere from 19% in the Central BMU to 138% in the North BMU.



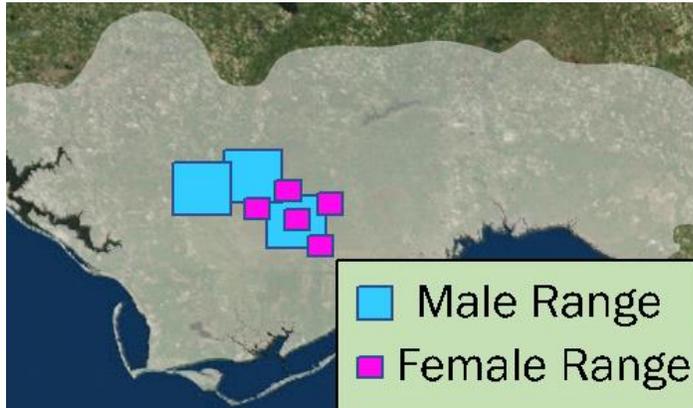
## Males vs Females



A lot of people think the picture to the left is a female and cub, but it is actually a male and female. Males typically weigh 250-450 pounds while females weigh between 125- 250 pounds. In Florida, the largest recorded male black bear weighed 760 pounds, and the largest female black bear weighed 460 pounds.

## Home Range

While bears may defend a food resource or mate while they are present, bears are not territorial. Bears respect a certain personal space, but often several animals overlap each other's space. A bear's living space that provides food, water and adequate cover is called a "home range."



While the size of a home range may vary for each season, males usually have a home range of 60 sq. miles, and females have a home range of 15 sq. miles. Within a male bear's range, approximately five females can overlap his range while also overlapping other male ranges.

## Cubs

The cubs are about the size of a soda can at birth and weigh 10-15 ounces. Litters range from one to five cubs, but two or three are most common (generally a male and a female). At birth, bear cubs have a very fine coat of hair and closed eyes. Cubs stay in the den until late spring or early summer until they are about five pounds, which is big enough to keep up with their mother.

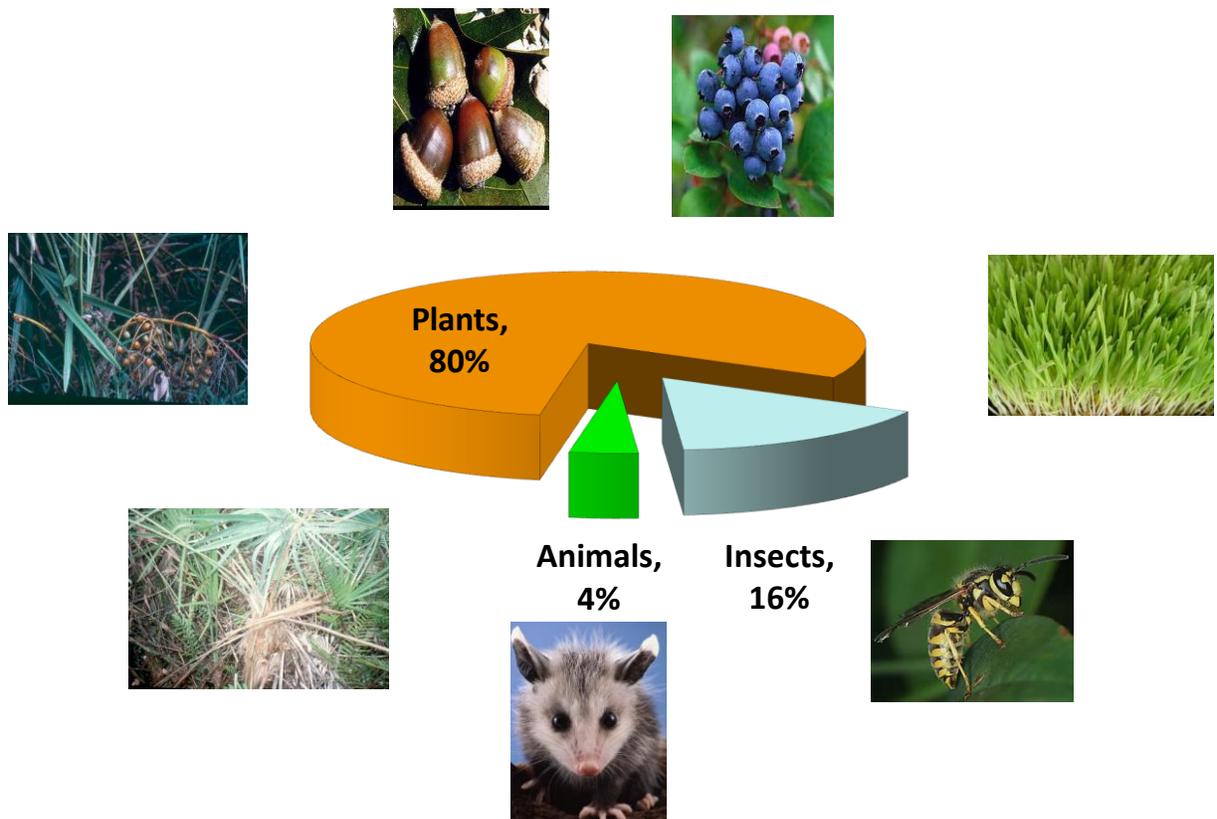


They will stay with their mother for about one and half years, and after learning all they can from their mother, the cubs head out on their own from April to August. Females can stay near

their mother and sometimes overlap ranges. Males are kicked out of their mother's range to find their own range and must compete with other young males and established adult males. This is why bears most often ending up in urban areas are yearling males.

## Diet

The vast majority (80%) of the black bear's diet is vegetative in nature: palmetto fruit and the heart, acorns and other nuts, lots of different types of berries, and even grasses. Surprisingly, 16% of their diet is insect based. It costs very little energy to roll over a log and find an entire colony of termites vs chasing down a deer and only catching it one out of ten times. Other insects they eat are wasps, bees, and ants. Generally, the final portion (4%) includes things that play dead (opossums, armadillos) or things that are dead (carrion). They may come across the occasional fawn stashed in palmettos, but they do not expressly search for them.



A bear is always looking for food and is not very particular as to what foods they eat. During the summer months, bears eat about 5,000 calories a day, which is the equivalent of two large cheese pizzas. However, bears start preparing for winter as fall ends by going through a process

of increased feeding called hyperphagia. They will eat around 20,000 calories a day, which is the equivalent of 8½ large cheese pizzas. Gaining weight allows bears to make it through the leaner winter months, where both male and female bears will lose weight due to the lack of abundant food items. Once freezing temperatures set in, bears will begin denning, where they go into a deep sleep. Bears can lose up to 25% of their body weight while denning.

## Sense of Smell



A bear's strongest sense is smell, which they use to pick up a scent from over a mile away! That is more than seven times better than a bloodhound. By examining the skull, you can see that the black bear has a large nasal cavity in order to pick up scents very far away. Bears, as a Family, are considered to have the best sense of smell of any land mammal.

## Bear Encounter vs Bear Contact

If you are traveling anywhere in bear country, you might come across a bear. If you encounter a bear at close range, you should stop and slowly back away as you quietly talk to yourself. Black bears are naturally shy and will try to avoid you. While rare, a black bear may attack you. If this happens, **FIGHT BACK!** A good phrase to keep in mind is, "If it is black, fight back. If it is brown, lay down." We don't have any brown bears in Florida, so if a bear attacks you, you should always attack back.



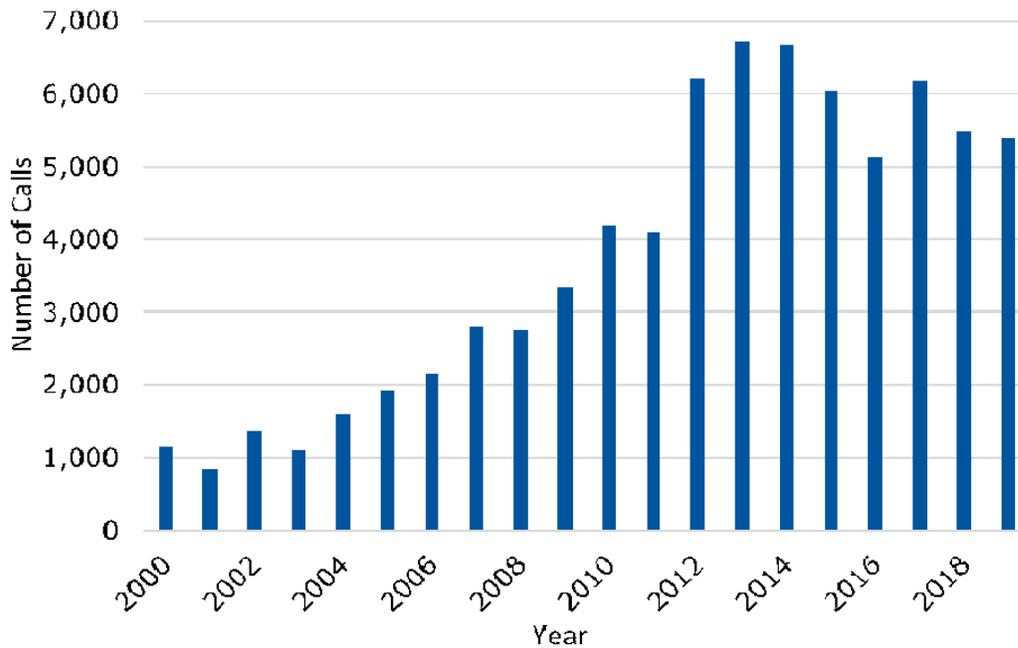
## Human Influence



Accidental feeding comes into play because bears are lazy and think with their stomachs. Remember, bears are naturally leery of people, so they are more likely to visit at night when there is less human activity. So, the key is to eliminate anything that would attract a bear to your home, such as waiting until the morning to put out curbside trash, take in pet foods at night, and clean grills after each use. Another important one is to suspend bird feeders 8-10 ft off the ground and 4 ft from the nearest tree, or even bring it in at night.

## Statewide Calls

There has been a steady increase in calls from the public. There are more people and more bears, so more interactions occurring. There are also more people who are aware of who to call now, so more are being reported. Looking at the figure below shows there has been a steady increase in calls since 2000. Some fluctuation is expected based on the year's natural food availability (good vs. bad mast year). One may notice there was a big drop in 2016. There are a lot of factors that influence calls, but some of the them are known for this year.

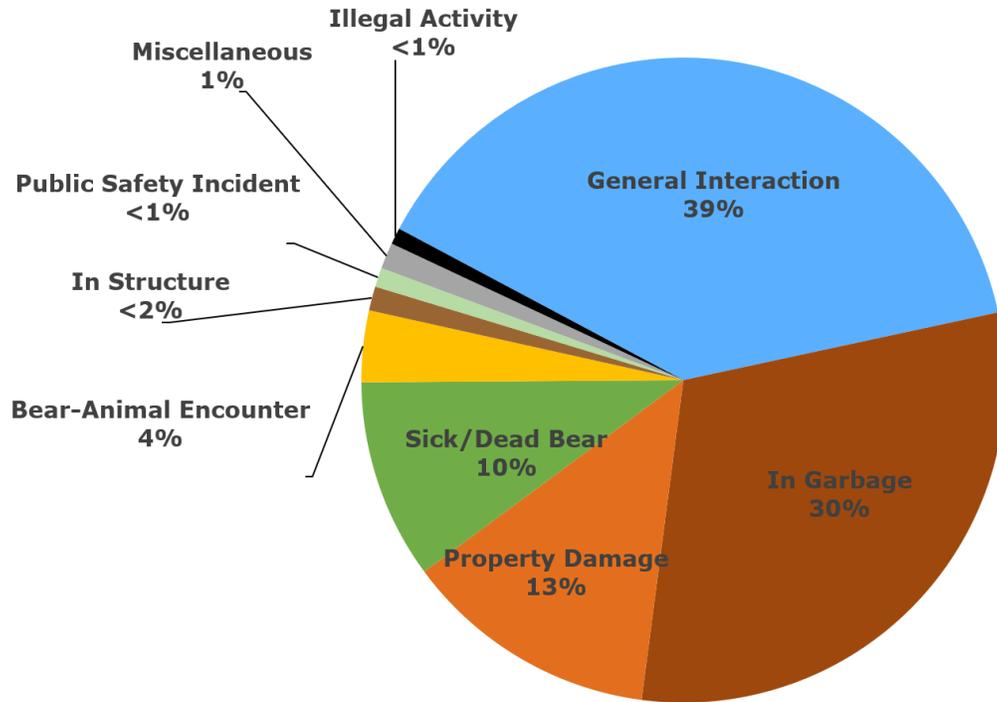


In 2015, FWC removed 116 bears for conflict-related issues, whereas an average year measures around 40. FWC also re-opened the bear hunting season, which almost doubled the number of bears removed from the population in a given year. On top of pure reduction in numbers, it's likely some of those 304 harvested bears had been involved in conflicts. Another contributing factor was advocacy groups actively encouraging the public NOT to call the FWC, believing that lower calls would lower the chances of another bear hunt.

Along similar lines, some members of the public believed that if they call the FWC, the only response would be to catch and kill the bear. Unfortunately, this usually becomes a self-fulfilling prediction. When people avoid calling FWC early in the process, bears become habituated and food conditioned. FWC has more options to try and minimize the conflicts before bears become habituated, but if people wait to call until issues escalate, FWC ends up with a public safety risk, and their options are limited.

### **Statewide Reason for Calls**

The blue slice, General Interactions, represent bears in the area, yard, tree or similar places. These bears are generally there getting ready to access garbage, so if we solve the garbage issue, we solve about 70% of the calls received by FWC and experienced by Floridians.



FWC receives more than 6,000 calls a year, and many of the calls result in FWC providing information on bears and advice on how to keep bears from accessing food sources. Close to 20% of calls are in potential violation of the rule against feeding bears. FWS also sends staff or contractors out to visit directly with residents and businesses to try to determine what is attracting bears and advise on how to prevent conflicts.



Law enforcement issued notifications to 3% of callers to encourage them to secure garbage or other attractants. The notification is a formal reminder that the person's actions are attracting bears and 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. Finally, 2% of calls warrant a trapping effort to remove a bear, either to kill a bear because it is a risk to public safety, or in rare cases, move it to a more remote location.

### Physical Contact with People



It is extremely rare for black bears to make physical contact with people. Since 1970, there have only been 27 incidents. Of those 27, 13 have led to moderate or serious injuries, which started occurring in 2006. Around 70% occurred in central Florida and usually involved a female with a cub, a dog or was an intentional interaction.

## Avoidance

When confronted by other bears, humans, or danger, bear behavior can be displayed in many ways. The most common is avoidance. Bears run away, hide in cover, or climb a tree. Bears feel safe in trees and are able to quickly climb to escape. In the case to the right, you can see even a cat can tree a bear.

