Reducing Human-Bear Conflicts in Florida Through Improved Waste Management

Introduction

Increasing human-bear conflicts are a concern in Florida as both human and bear populations increase, occupied bear range expands, and human development continues to reduce bear habitat (Figure 1). “Urban bears” are becoming more prevalent in many areas of Florida as the edge of occupied bear range moves from rural areas into suburban or even urban locations. While black bears are naturally shy and try to avoid people, bears are attracted to developed areas when food is easily accessible, typically from unsecured garbage cans or pet food that is available. As bears continue to find these human-provided foods, they begin to lose their natural fear of people, which leads to conflicts ranging from nuisance behavior to serious threats regarding public safety. Eliminating food sources that attract bears is the most important action that can be taken to resolve and prevent conflicts with bears in Florida. Addressing this issue requires cooperation between the Florida Fish and Wildlife Conservation Commission (FWC), elected officials, local governments, businesses, residents and waste management companies.

Background

The FWC’s mission is to “manage fish and wildlife resources for their long-term well-being and the benefit of people.” The FWC strives to manage wildlife in a responsible manner and reduce or eliminate conflicts between people and wildlife. The FWC has had a successful Bear Management Program in place for several decades that has worked to study, monitor, and manage black bears in Florida. A major focus of that program includes working to reduce conflicts, which includes education and outreach, direct interventions, work in communities to address waste management, and enforcement of feeding violations. Over 20,000 Florida residents and visitors interact with FWC bear management staff each year through presentations and exhibits at local meetings, schools, and festivals. The FWC offers extensive
information on its website, including audio recordings and videos to help the public learn how to avoid conflicts with bears.

Figure 1. Bear-related calls received by FWC in Florida from 1990 to 2014 (n = 49,188). Despite all these efforts, bear-related calls received by the FWC have increased 400% over the last decade (Figure 2). The majority of the statewide calls FWC receives are related to bears entering neighborhoods to access garbage and other human-provided foods (i.e., reports referring to a bear in garbage, the general area, a yard, or up a tree; Figure 3).
Figure 2. Bear-related calls received by FWC in Florida from 1990 to 2014 (n = 49,188).

Figure 3. Bear-related calls categorized by reason for the call received by FWC between 1990 and 2014 (n = 49,188).
The FWC responds in the field to complaints regarding bears by visiting with residents and businesses to determine the cause of the conflict and provide advice on how to resolve the issue. When FWC learns of bears that may pose a public safety threat, staff will set traps to capture and remove the bear. The recent unprecedented number of serious bear injuries (four in 13 months) resulted in a re-evaluation of what behaviors by bears pose a public safety risk. Accordingly, the FWC has captured and killed 53 bears during the first five months of 2015, which is a significant increase over the average of 26 bears killed each year during the last three years. Prior to the recent attacks, the FWC tried to work with residents to secure attractants before removing most bears in hopes that the bears would leave when no food was available. However, when food attractants aren’t completely eliminated the bears remain, problems continue, and human safety may become an issue.

To help protect human safety and manage bears wisely, the FWC has a law enforcement role regarding bear access to human-provided foods. Florida Administrative Code 68A-4.001(3) prohibits people from feeding bears or allowing bears to access human-provided foods when those actions are likely to result in a public nuisance. The rule and its associated penalties for violations have recently been revised to increase clarification, enforceability, and compliance. These changes provide law enforcement officers with better tools to work with local communities on securing waste and other bear attractants.

Property damage caused by black bears has been an increasing source of complaints from the public. To help address these impacts, the FWC is working to empower local citizens and landowners to be an active part of overall bear management efforts. The FWC is changing policies and rules that will allow people to scare and harass bears before they become food...
conditioned and habituated to humans. Additionally, FWC is authorizing landowners or lessees to apply for a permit to kill a bear that is causing property damage. Such a permit would only be available after the FWC has determined there are no viable non-lethal options and the FWC has been unable to capture and remove the bear, the landowner or lessee could then kill the bear.

The FWC has begun the process to initiate a hunting season for October 2015 in order to stabilize four of the seven bear populations in Florida. While hunting may not have a direct effect on resolving human-bear conflicts, it is the most effective way to manage bear populations. As bear populations in Florida continue to increase, they begin to expand out from forested habitats and into human-dominated areas. Hunting can manage the bear populations to levels that align with existing forested habitat which can reduce the number of bears entering human developed areas. All states and provinces in North America with over 600 resident black bears use education, direct conflict response, and hunting as part of their bear management programs.

Importance of Local Governments and Waste Service Companies
The FWC places a high priority on public safety, but the FWC cannot eliminate human-bear conflicts nor assure public safety on its own. Educating the public, removing bears, and enforcing feeding prohibitions only treats the problem, not the source of the problem. Likewise, hunting alone will not solve all conflicts. Years of experience in others states show that proper waste management practices are the key component to successfully reducing human-bear conflicts to acceptable levels. In Florida and across bear range in North America, we have learned that entire communities need to keep all of their garbage and other attractants secure from bears in order to significantly reduce human-bear conflicts.

Waste management is the responsibility of municipal and county governments. FWC has worked for many years providing technical assistance and limited grant resources to local governments in an effort to incentivize the availability of bear-resistant waste service equipment. Nine of the 12 counties that offer large scale distribution of bear-resistant trashcans to their residents have received incentive funds from the FWC (Table 1). The waste service fees for bear-resistant trashcans vary widely by waste company, county, and in some cases, within the same county (Table 1).

Table 1. Information on bear-resistant trashcan and modification kit availability, costs, use, and Conserve Wildlife Tag (CWT) license plate grant funds used in Florida.

<table>
<thead>
<tr>
<th>County</th>
<th>Company</th>
<th>Initial Fee</th>
<th>Extra Cost/Mo</th>
<th># of Cans/ Kits in Use</th>
<th>CWT Grant Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franklin</td>
<td>Waste Pro</td>
<td>None</td>
<td>$5.00</td>
<td>352</td>
<td>$6,000³</td>
</tr>
<tr>
<td>Gadsden</td>
<td>Waste Pro</td>
<td>None</td>
<td>$6.00</td>
<td>Unknown</td>
<td>None</td>
</tr>
<tr>
<td>Gulf</td>
<td>Waste Pro</td>
<td>None</td>
<td>$12.00</td>
<td>Unknown</td>
<td>None</td>
</tr>
<tr>
<td>Highlands</td>
<td>Choice Environmental</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>$20,000</td>
</tr>
<tr>
<td>Lake</td>
<td>Progressive/WCA/Waste Pro</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>$20,000</td>
</tr>
<tr>
<td>Leon</td>
<td>Waste Pro</td>
<td>$30.00</td>
<td>$8.00</td>
<td>45</td>
<td>$10,000</td>
</tr>
<tr>
<td>Okaloosa</td>
<td>Waste Management</td>
<td>None</td>
<td>$10.50</td>
<td>20</td>
<td>$4,930</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>$5.31</td>
<td>1,553</td>
<td>$9,148</td>
</tr>
<tr>
<td>Orange</td>
<td>Veolia</td>
<td>$200.00</td>
<td>None</td>
<td>40</td>
<td>$9,997</td>
</tr>
<tr>
<td>Santa Rosa</td>
<td>Waste Management</td>
<td>$10.00</td>
<td>$5.31</td>
<td>75</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Waste Pro</td>
<td>$60.00</td>
<td>$15.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>County</td>
<td>Company</td>
<td>Price</td>
<td>Deposit</td>
<td>Containers</td>
<td>Total</td>
</tr>
<tr>
<td>------------</td>
<td>----------</td>
<td>--------</td>
<td>---------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td>Seminole</td>
<td>Waste Pro</td>
<td>$180.00</td>
<td>$5.00</td>
<td>None</td>
<td>$20,000</td>
</tr>
<tr>
<td>Volusia</td>
<td>Waste Pro</td>
<td>$200.00</td>
<td>None</td>
<td>45</td>
<td>$5,000</td>
</tr>
<tr>
<td></td>
<td>Republic</td>
<td>None</td>
<td>None</td>
<td>132</td>
<td>$29,964</td>
</tr>
<tr>
<td>Wakulla</td>
<td>Waste Pro</td>
<td>$60.00</td>
<td>$6.00</td>
<td>34</td>
<td>$6,000</td>
</tr>
</tbody>
</table>

\( ^{a} \) A total of $6,000 was provided for residents of Franklin and Wakulla counties to try out 200 bear-resistant trashcans for free for six months.

\( ^{b} \) Funds for Lake and Highlands counties have been committed, and both counties have indicated they want a similar approach to Seminole County but numbers of containers in use were not available at the time of this report.
While the FWC has tried to influence local governments, we do not have the authority or the resources to affect the needed change at a large scale. Local governments have the responsibility to contract with companies that will offer waste service pick up to their residents and businesses. In turn, waste management companies have a responsibility to work with local governments and residents to manage waste in a manner that does not attract bears and other wildlife in ways that could create a public safety risk.

Some problems are resolved by individual citizens taking personal responsibility and securing their attractants; however, relying solely on voluntary actions has not been sufficient in Florida or any community in bear range across North America. If just a few homes in a community do not secure their food, the entire neighborhood will still have bears frequenting the area to access that food source. It requires 100% compliance to succeed in preventing bears from lingering in neighborhoods. A local government can implement an ordinance that requires all residents and businesses in the area to secure their garbage and other attractants from wildlife. Ordinances do not need to prescribe the method in which garbage is secured, only that it is secured until the morning of garbage pickup or when residents take garbage to a landfill. There are many technical solutions and products available on the market that have been proven effective (Appendix 1). FWC has been working with municipalities and developers
to address this issue by incorporating language that would require people to secure garbage and other attractants in their charters, homeowner association covenants, and development orders (Appendices 2 and 3). The table below shows survey results of residents’ interactions with bears before and 12 months after using retrofitted or bear-resistant trashcans.

<table>
<thead>
<tr>
<th>Bear Interactions Before</th>
<th>Bear Interactions After</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrofitted Trashcans</td>
<td>71%</td>
<td>32%</td>
</tr>
<tr>
<td>Bear-Resistant Trashcans</td>
<td>97%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Enforcement of ordinances addresses the rare cases where residents or businesses know the consequences but still choose not to secure their trash. Ordinances can guide residents and businesses to the right information on bears and what to do if they encounter one in their neighborhood. There are many examples of municipalities across North America, including in Florida, who have enacted ordinances to keep waste secure from bears (Table 2).

Table 2. A sample of North American locales and the years in which they adopted ordinances to keep their waste secure from bears and other wildlife.

<table>
<thead>
<tr>
<th>Locale</th>
<th>Municipality Type</th>
<th>State/Province</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juneau</td>
<td>City</td>
<td>Alaska</td>
<td>1987</td>
</tr>
<tr>
<td>Madera</td>
<td>County</td>
<td>California</td>
<td>1995</td>
</tr>
<tr>
<td>Mammoth Lakes</td>
<td>Town</td>
<td>Montana</td>
<td>1996</td>
</tr>
<tr>
<td>Gatlinburg</td>
<td>City</td>
<td>Tennessee</td>
<td>1998</td>
</tr>
<tr>
<td>Banff</td>
<td>City</td>
<td>Alberta</td>
<td>1999</td>
</tr>
<tr>
<td>Snowmass Village</td>
<td>Town</td>
<td>Colorado</td>
<td>1999</td>
</tr>
<tr>
<td>British Columbia</td>
<td>Province</td>
<td>British Columbia</td>
<td>1999</td>
</tr>
<tr>
<td>Pitkin</td>
<td>County</td>
<td>Colorado</td>
<td>2000</td>
</tr>
<tr>
<td>West Yellowstone</td>
<td>Town</td>
<td>Montana</td>
<td>2000</td>
</tr>
<tr>
<td>Canmore</td>
<td>Town</td>
<td>Alberta</td>
<td>2001</td>
</tr>
<tr>
<td>Placer</td>
<td>County</td>
<td>California</td>
<td>2001</td>
</tr>
<tr>
<td>Steamboat Springs</td>
<td>City</td>
<td>Colorado</td>
<td>2001</td>
</tr>
<tr>
<td>Cordillera</td>
<td>Home Owner Association</td>
<td>Colorado</td>
<td>2002</td>
</tr>
<tr>
<td>Eagle</td>
<td>County</td>
<td>Colorado</td>
<td>2007</td>
</tr>
<tr>
<td>Vail</td>
<td>City</td>
<td>Colorado</td>
<td>2007</td>
</tr>
<tr>
<td>Crowsnest Pass</td>
<td>City</td>
<td>Alberta</td>
<td>2007</td>
</tr>
<tr>
<td>Teton</td>
<td>County</td>
<td>Wyoming</td>
<td>2008</td>
</tr>
<tr>
<td>Sitka</td>
<td>City</td>
<td>Alaska</td>
<td>2008</td>
</tr>
</tbody>
</table>
Success stories

Communities with enforced ordinances have experienced a dramatic drop in human-bear conflicts. Prime examples include Gatlinburg in Tennessee as well as Hurlburt Air Field and Wingfield North in Florida (Table 2).

Gatlinburg, Tennessee

Gatlinburg is the eastern gateway to Great Smoky Mountains National Park, the most visited National Park in America. One of the biggest tourist draws for the park are black bears. During peak season, Gatlinburg receives an average of 40,000 visitors a day.

In 1997, a massive natural food failure occurred which caused a dramatic increase in the number of bear accessing unsecured garbage and other foods in town. After many bears were killed by local officials for conflict behavior in town, local residents and visitors contacted the Tennessee Wildlife Resources Agency (TWRA) as well as the Park asking for alternative measures to reduce human-bear conflicts. In 1998, TWRA, the National Park Service, and city officials developed a cooperative effort to reduce conflicts. The town passed an ordinance requiring trash be secured, and the three entities jointly hired a person to enforce the ordinance, trap and scare bears out of town, and educate the public on how to avoid conflicts.
While black bears continue to wander into town on occasion, the ordinance, enforcement, and educational efforts have resulted in a dramatic decrease in the number of human-bear conflicts in the town that some refer to as ‘The Bear Captial of the World’.
Hurlburt Air Field, Okaloosa County, Florida

Hurlburt Air Field is the home of the U.S. Air Force’s 1st Special Operations Wing and Special Operations Command. Over 15,000 active duty military members, families and civilians live and work on the base. The base also had high quality black bear habitat, as well as sources of human-provided foods like unsecured garbage.

In 2008, the Base’s Natural Resources Manager (NRM), Kristal Walsh, got together with the FWC to develop a comprehensive approach to reduce human-bear conflicts. The NRM worked with Civil Engineering and base housing to replace all regular residential trashcans and commercial dumpsters with bear-resistant models, and require all base personnel to use the bear-resistant trashcans and follow other appropriate behavior to keep food from bears. In addition, NRM initiated a comprehensive educational effort. NRM and FWC staff teamed up to reach an average of 3,000 people on base each year through community festivals and civic group meetings. Each month around 100 airmen and their families learn about how to avoid conflicts with bears as part of their Base orientation classes. FWC and NRM trained over 150 base security personnel on how to respond to bear conflicts on Base.

As a result of those combined actions, human-bear conflicts declined 70% by 2011. The FWC presented the Base an award for their efforts, recognizing them as the first Bear Wise Base in Florida. Base Wing Commander Colonel James C. Slife stated, “Although the bear-proof containers helped us achieve that objective, the root cause of our success has been the cooperation and dedication that our airmen and families have shown in using the tools provided to them.”
Wingfield North Homeowner’s Association, Seminole County, Florida

Wingfield North is a community of 115 homes on one-acre or larger lots in the Wekiva River Basin. The area is heavily wooded with ponds and conservation areas, and is adjacent to Wekiva River State Park.

On December 3, 2013, a woman was attacked by a black bear in Longwood within the Wingfield North community. Bears in this community had become so used to people that in this case a female bear with cubs allowed a woman to approach, then lashed out causing serious injuries. The Wingfield North Homeowner’s Association contacted the FWC asking what they could do to reduce human-bear conflicts and prevent this sort of situation from recurring. The FWC advised that the best way to reduce conflicts on a community wide basis is to require all residents to keep their trash and other attractants secure. The Board reviewed ordinances from other areas (Table 2) and in July 2014, passed their own bylaws to keep residents from attracting bears into the community (Appendix 2). The Association also purchased bear-resistant trashcans for all of their residents and required their proper use. The Association has a warning and citation system in place to ensure proper compliance with their bylaws, and to date only three residents have received warnings and no residents have had to receive citations. Resident reports on human-bear conflicts to the community security office have declined dramatically since the new bylaws were adopted. The Association’s actions provided residents with the tools and information they needed to become Florida’s first Bear Wise Homeowner’s Association.
Future Solutions- a call to action

The public needs to have reasonable access to a wide variety of tools to secure their garbage and other attractants. In some cases, commercially manufactured bear-resistant trashcans are the best choice for securing garbage. These cans can be much more expensive than standard trashcans, and so waste management companies charge residents an additional monthly service fee or require residents to purchase bear resistant trash cans themselves. (Table 1).

FWC has found through surveys that residents are reluctant to pay much more than $6 extra per month in lease or service fees for bear-resistant trashcans, and this concern has a direct effect on the number of bear-resistant cans in use. FWC therefore recommends that local governments secure the lowest possible service charges when they negotiate their waste service contracts. FWC provides advice to communities based on what we have learned over the years is working in communities to address waste management. For example, FWC has learned that bear-resistant trashcans often last 60% longer than regular trashcans and this increase in durability over regular trashcans should be considered during contract negotiations. FWC has also reported that waste management companies seem more likely to offer bear-resistant trashcans at reduced rates when 1) the county or city they are operating in has universal service (i.e. all residents required to have waste service), and/or 2) the contract with the county or city extends for several years. In those situations, the companies report that the higher initial capital investment in bear-resistant trashcans, and the equipment to service them, is offset by the higher number of customers associated with either universal service or the longer time frame of the contract to recoup the costs.

Successful resolution of human-bear conflicts could be achieved when all Florida communities in bear range have solutions in place to address bear conflicts. This would include waste
management solutions, enforcement of appropriate regulations, and educating the public so that they know:

- What attracts bears,
- How to secure attractants like dog food and bird feeders,
- How to react if they encounter a bear, and
- When to call FWC for assistance.

However, the most difficult and yet most effective part of the overall solution is waste management. The problem of unsecured waste needs to be addressed comprehensively at the appropriate scale.

Collectively, these solutions can be referred to as Bear Wise. Bear Wise is currently being promoted by both the Northeastern and Southeastern Associations of Fish and Wildlife Agencies as a region-wide initiative, which would result in all citizen east of the Mississippi River being familiar with bear management issues and solutions under one common program.

Here in Florida the good news is that all of the steps are known and can be achieved. Many communities across bear range in North America have taken action to reduce human-bear conflicts and become Bear Wise. The best approach brings together locally-elected officials and local government staff, along with waste management companies, to work together to resolve the problem in a cost-effective manner at a large scale. Florida must continue to advance down this same path, yet the FWC cannot ensure success alone.

In this regard, the FWC will continue to perform its role to educate the public, remove conflict bears, provide technical assistance, manage bear populations, and enforce feeding prohibitions. Additionally, the FWC asks local governments, municipalities, and home owner associations in areas with frequent human-bear conflicts to partner with us by:

1) Ensuring their residents and businesses have access to multiple methods of securing garbage and other bear attractants. If these methods require additional costs to residents and businesses, the local government should negotiate with their waste management provider to offer these at the most reasonable price possible.
2) Enacting ordinances, covenants, or bylaws at the appropriate level that would require residents and businesses to keep their garbage and other bear attractants secure.
3) Having an enforcement mechanism in place to address non-compliance with requirements to keep garbage and other bear attractants secure.

Through collective action in partnership on all of these components, the FWC, elected officials, local governments, businesses, residents and waste service companies can create a Bear Wise Florida that promotes the conservation of bears while ensuring human safety.
Appendix 1

FWC Solutions for Individuals and Communities

The FWC has therefore focused efforts on encouraging residents and businesses to secure trash and other items that attract bears into communities. There are many options recommended by FWC to secure garbage from bears and other wildlife, including low and no cost options that can be accomplished with some modifications in human behavior or existing equipment:

1) Store trashcans in a secure area, such as a sturdy shed or garage, and put it curbside only on the morning of garbage pickup (not the night before), or when the resident is ready to transport their garbage to the landfill.

2) Attach two sets of metal gate hasps to a sturdy trashcan to make it more bear-resistant. FWC offers instructions on how to ‘retrofit’ a trashcan at www.MyFWC.com/Bear, and the hardware costs around $20. While the retrofit is not guaranteed to be ‘bear-proof’, it greatly reduces a bear’s chance of getting into the garbage.

3) Build a small shed to store trashcans. Important elements include leaving no gaps along edges, using screws instead of nails, and anchoring it into the ground. FWC has plans on how to build these sheds at www.MyFWC.com/Bear. The materials for the sheds can cost between $100 and $250.
4) Buy a commercially-manufactured bear-resistant trashcan. FWC recommends using bear-resistant trashcans with automatically-locking lids (e.g. BearSaver by Otto Environmental, BearTight by Toter, and Kodiak by Northland Products). Studies in other states have shown that users of bear-resistant trashcans requiring lids to be manually clipped or otherwise locked often do not remember this extra, but critical step. Cans range from $60 to $270 depending on the size and type. A list of can types is available at www.MyFWC.com/Bear.

- If residents do not have trash service, bear-resistant trashcans can be purchased from several online retailers, including Ace Hardware, Lowe’s, and Home Depot.
- If residents have trash service, the waste service provider can make bear-resistant trashcans available to residents for an additional monthly fee ($5 to $15/month).

5) Enclose trashcan(s) within electric fencing. Instructions are available at www.MyFWC.com/Bear and a ‘How To’ video on FWC’s YouTube channel at https://www.youtube.com/MyFWCvideos. Electric fencing systems can cost between $60 and $200.

6) If the resident lives in a small community under the same management, or simply arranges with their neighbors, they can switch from individual trashcans to a dumpster. Dumpsters are far easier and cheaper to secure from bears than individual trashcans.

FWC has tested both the retrofit kits and bear-resistant trashcans. Residents involved in the tests were surveyed before they received the retrofits or bear-resistant trashcans as well as six and 12 months after. While both of these devices were successful at reducing human-bear conflicts, the bear-resistant trashcans were the most effective option (Table 1).
Table 1. Survey results of residents’ interactions with bears before and 12 months after using retrofitted or bear-resistant trashcans.

<table>
<thead>
<tr>
<th>Bears Interactions</th>
<th>Bear Interactions</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>Retrofitted Trashcans</td>
<td>71%</td>
<td>32%</td>
</tr>
<tr>
<td>Bear-Resistant Trashcans</td>
<td>97%</td>
<td>5%</td>
</tr>
</tbody>
</table>

The vast majority of survey respondents in both test areas highly recommended the devices (>90%) and indicated the devices were effective at reducing their human-bear conflicts (>87%).

In a separate survey, FWC asked Florida residents and businesses who had bear-resistant trashcans and dumpsters about their experiences with bears. Respondents experienced a dramatic decrease in the frequency of human-bear conflicts after using bear-resistant containers (Figure 1). In addition, 96% of respondents indicated they would recommend bear-resistant containers to others.

Figure 1. Comparison of frequency of human-bear conflicts experienced by Floridians before and after they started using bear-resistant containers (including dumpsters and individual residential trashcans).
For residential customers, FWC recommends using bear-resistant trashcans with automatically-locking lids (see http://www.myfwc.com/media/1496088/BearResistantContainers.pdf). Studies have shown that users of bear-resistant trashcans requiring lids to be manually clipped or otherwise locked often do not remember this extra, but critical step. In addition, waste service providers prefer this style of can as it typically can be opened more quickly than one requiring additional steps to open.

The FWC recommends any schools, restaurants, community centers, and other business in bear country use bear-resistant dumpsters or cans to keep bears from accessing garbage and protect people frequenting these locations. There are several options to make a regular dumpster bear-resistant, including changing from simple plastic lids to plastic lids reinforced with metal frames and lock bars (see http://www.myfwc.com/media/1334130/whatisabearproofdumpster.pdf).
Appendix 2.

Gatlinburg (Tennessee) City Ordinance 2188

Section 8-111 Animal Resistant Garbage Collection Devices
From and after June 1, 2000, all garbage, containers, dumpsters or equipment used to store garbage, not otherwise located within an approved enclosure prior to municipal or private pick-up in the areas described as follows: The entire area within the city limits on the west side of the Foothills Parkway: the area north of the National prong of the Little Pigeon River between Parkway and the Foothills Parkway boundary bounded on the north by LeConte Street and the Skyland Park and the Winfield Heights Subdivisions: the entire area between the National Park Service boundary on the South and Southeast city limits from Low Gap Road on the east and to the South of Highway 321 and Parkway, and as shown on a map dated December, 1998 on file at the offices of the City Manager and incorporated herein by reference, shall be of a type which shall be resistant to animals being able to open, overturn or remove garbage from them. Each type of container shall be of a design approved by the City Building Official. This requirement shall not apply to containers that are also enclosed within fences or other enclosures which do not allow entry by scavenging animals or are located inside a structure such as a house, building or other enclosed structure and are taken to a City or County approved garbage collection site by the owner.

Section 8-112. Enclosures
All garbage containers in said areas of a type which do not meet City standards as being animal resistant shall be fully enclosed in a manner to prevent entry by animals. Such enclosures shall be approved in advance by the City Building Official. Any enclosure which does not prevent the entry of animals and removal of garbage from the enclosure shall be modified by the owner to prevent such entry and removal. Owners who are notified of a deficient enclosure shall have 60 days to cure such deficiency. All garbage containers of a type not resistant to animals shall be so enclosed by June 1, 2000. Every animal resistant enclosure shall be properly secured. Failure to keep such enclosure secured and closed shall also be a violation of this section.

Section 8-113. Grease
The provisions of Sections 8-111 and 8-112 shall also apply to containers and enclosures used to store grease and the contents of grease traps.

Section 8-114. Restaurants
All restaurants within the city limits of the City of Gatlinburg shall be required to comply with the provisions of 8-111 through 8-113 with regard to garbage containers and/or enclosures for the storage of garbage containers and grease.

Section 8-115. Garbage Collection
The City will not collect garbage which is not placed in an animal resistant container unless it is placed within an approved enclosure, as required in Sections 8-111 through 8-114. The provisions of Sections 8-111 and 8-112 shall not apply to curbside garbage collection containers within the downtown business district.
Section 8-117 Injunctive or Other Relief
In addition to any penalty, violation of the provisions of this chapter may be remedied by obtaining injunctive relief, or by a restraining order, or other appropriate equitable remedy by the city.

Section 8-118 Penalty
Every person who shall violate any provision of this chapter shall be punished by a fine not to exceed $500 per offense. Each day that a violation shall occur shall be a separate offense.
Appendix 3.

WINGFIELD NORTH (Longwood, Florida) HOMEOWNERS’ ASSOCIATION
“BEAR-WISE” COMMUNITY POLICY

Wingfield North is a community that derives its desirability in part from its proximity to the Wekiva River Preserve and the wildlife that inhabit it. In light of this, it is likely that Florida black bears will enter the community from time to time seeking food sources, which may result in bear encounters that pose potential hazards for residents and their invitees. When bears become accustomed to entering residential areas for food, they become “habituated” to human contact, and no longer fear humans. These circumstances can give rise to attacks when humans encounter them, typically by surprising them in places where they were not expected. Bears that have become habituated to human contact cannot necessarily be relocated successfully, since they tend to seek out human food sources again in other locations. As such, these bears generally have to be euthanized. Accordingly, it is in the best interests of the community and its residents, as well as the local bear population, to implement, foster and promote a program establishing Wingfield North as a “bear-wise” community, by promulgating standards, governing the conduct of residents, that are intended to minimize the circumstances giving rise to (i) bear incursions into the community, and (ii) habituation of the local bear population to human contact.

To address this problem for the benefit of all Wingfield North residents, and in order to promote the health, safety and welfare of the community and its residents, Wingfield North Homeowners’ Association, Inc. (the “Association”), by and through its Board of Directors and pursuant to the authority granted in (i) Article V, Section 2 of the Declaration of Covenants and Restrictions (the “Declaration”), (ii) Article VI, Section 3 of the Declaration, and (iii) Article IV of the Association’s Articles of Incorporation, has adopted this Policy to establish Wingfield North as a “bear-wise” community.

The following are matters of which residents should be aware, and actions that residents should take in order to be good stewards within the community and reduce bear interactions:

Education - Be aware of the possibility that bears will enter the community. Bears may be encountered by homeowners in yards, or walking around the community, especially when walking dogs. When out at night, be alert and carry a flashlight to avoid being surprised by a bear. Consider carrying an air horn and/or bear spray. Review the Florida Fish and Wildlife Conservation Commission webpage called “Living with Black Bears,” at http://myfwc.com/bear. This webpage offers suggestions on how best to react in the event of bear contact. Other resources include The Get Bear Smart Society at http://www.bearsmart.com, and The Southeastern Association of Fish & Wildlife Agencies at http://www.bear-wise.com/index.html.

Reporting Bear Activity -
Florida Fish & Wildlife Conservation Commission (FWC) Ocala Regional Office at (352) 732-1225 - Report bear encounters or intrusive bear activity.

FWC at (888) 404-3922 - Report known instances of anyone feeding bears.

Association’s gatehouse at (407) 333-0580 – Report bear sightings so that a gate attendant can (i) keep a log of all reported bear activity, and (ii) post a “Bear Alert” sign in the window of the gatehouse. This sign will only be used when a bear is actually reported in the community and will be kept in the gatehouse window for 24 hours after such a report is made.

**Maintaining Signage** - The Association will maintain a permanent sign at the entrance to the community, warning incoming drivers that the community is in an area where bears may be encountered, and advising them to be alert and avoid contact.

**Limiting Natural Food Sources** – Bears are attracted to certain fruit trees (not citrus), nut trees and berry bushes. If adding landscaping to your property, please investigate and avoid this type of landscaping, keeping in mind that many plants produce berries or seeds that people don’t eat, but bears do, so select landscaping with care. Vegetable gardens, especially those containing potatoes and root vegetables such as carrots and beets, also attract bears, so those types of vegetables should be avoided in gardens. Fruit trees, nut trees, berry bushes and vegetable gardens should not be placed near walkways, patios, porches or entranceways. Fruits, nuts, berries and vegetables should be collected when ripe, or if fallen. Birdfeeders are discouraged, but if used, the birdseed and feeder should be brought indoors at night. If using a birdfeeder, quality birdseed without red millet seeds should be used, as most birds toss this type of seed out of the feeder, allowing it to accumulate on the ground and attract bears. The ground underneath birdfeeders should be kept free from accumulations of birdseed. The housing of domestic animals outside the home (such as in bird cages, rabbit cages, dog houses, etc.) should be avoided, but if done, then all pet enclosures should be secured to preclude access by bears.

**Securing Garages, Patios and Porches** - Bears enter garages, patios and porches looking for garbage, pet food and other attractants. While they are there, they may open cabinets, freezers and refrigerators looking for food, or even enter the house. Garage doors should be kept closed except when entering or exiting the garage or when the garage is occupied by people. BBQ grills should not be unattended while in use (since the scent is a bear attractant) and should be thoroughly cleaned after each use. Used plates, dishes, containers and glasses should be removed from patios and porches promptly following use.

**Securing Vehicles** - Bears are known to break into vehicles, especially when they smell food in them. You should not leave pet food, groceries, garbage, coolers or food products of any type or other scented items (like chapstick) in vehicles.
The following are requirements which will be enforced by the Association:

**Securing Human Food Sources** - Residents may not feed wild animals of any kind, with the exception of birds, nor engage in conduct that attracts wild animals into the community. Do not leave food waste in areas that are accessible by wild animals, or allow wild animals to access trash cans, food waste, pet food, BBQ grills, refrigerators or freezers in garages, porches or patios. If pets are fed outside the house, pet food must be brought inside a secure structure (inaccessible by bears) after the pets are fed. Composting food waste is prohibited unless it is secured to preclude access by bears. Beekeeping attracts bears, and is prohibited. Salt and mineral blocks also attract bears, and are prohibited.

**Use of “Bear-Resistant” Trash Cans** - The Association will purchase and provide for each resident’s use a single commercially manufactured “bear-resistant” trash can meeting the requirements of Seminole County and the applicable waste-hauler servicing the community, to be used for the disposition of household food waste. All food waste must be placed in a bear-resistant trash can for pick-up by the waste-hauler. Other waste (i.e., non-food waste) may be placed in a regular trash can. Unless the Association elects in the future to pay, out of funds collected via assessments against the homeowners, the annual or periodic fee required by the waste-hauler to service each resident’s bear-resistant trash can, residents are responsible for paying same directly to the waste-hauler. If any resident fails to pay this fee when due, the Association may do so (in addition to exercising any other right or remedy) and recover the amount (together with interest at the rate specified in the Association’s governing documents and any costs of collection), from the resident, in the same manner as assessments. Refuse cans containing food waste may not be put out for pick-up in advance of the morning of collection. Bear-resistant trash cans provided by the Association are the property of the Association. Each resident’s bear-resistant trash can has a serial number indexed to that resident’s address. If such a can is lost or damaged beyond use, it must be replaced by the resident at the resident’s expense. When a resident sells their home, they must provide the purchaser with the seller’s bear-resistant trash can. Any incoming purchaser who does not obtain the outgoing seller’s bear-resistant trash can will be responsible for purchasing a new bear-resistant trash can meeting the requirements of Seminole County and the applicable waste-hauler.

Feeding bears (whether deliberately or inadvertently) can also be a violation of Florida law, entitling the FWC or other governmental authorities to impose fines or other penalties. This Policy does not address such matters, which are in addition to any remedies the Association may be able to assert for a violation of the requirements of this Policy.

Non-compliance with any requirement of this Policy shall be addressed by the Association in the same manner as a violation of the Declaration. This may include, without limitation, the imposition of fines by the Association’s Fine Committee. For the purpose of imposing fines, which are at the discretion of the Fine Committee, as of the adoption of this Policy the Board of Directors of the Association recommends the following fines for violations of this Policy,
recognizing that the decision to impose a fine and the amount of any fine are within the sole discretion of the Association’s Fine Committee in accordance with the Association’s governing documents (including the Declaration and the Association’s Fine Policy & Procedure), as well as the requirements of Section 720.305, Florida Statutes, and that the Fine Committee may consider mitigating or aggravating circumstances in making any determination:

(i) 1st violation: Warning letter from Association;

(ii) 2nd violation: $250 fine;

(iii) 3rd violation: $500 fine;

(iv) 4th and each subsequent violation: $1,000 fine.