



2015 Florida Black Bear Hunt Summary Report

The Florida Fish and Wildlife Conservation Commission (FWC) opened 4 of the 7 bear management units (BMU) in Florida (Figure 1) to bear hunting on Oct. 24, 2015.

Purpose of the Hunt

The purpose of a limited bear hunt was to stabilize Florida's large, resilient and growing bear populations, as one part of FWC's overall approach to managing bears. The continued growth in black bear populations means we needed to employ a range of management tools including a limited bear hunting season in four of the state's seven bear management units.

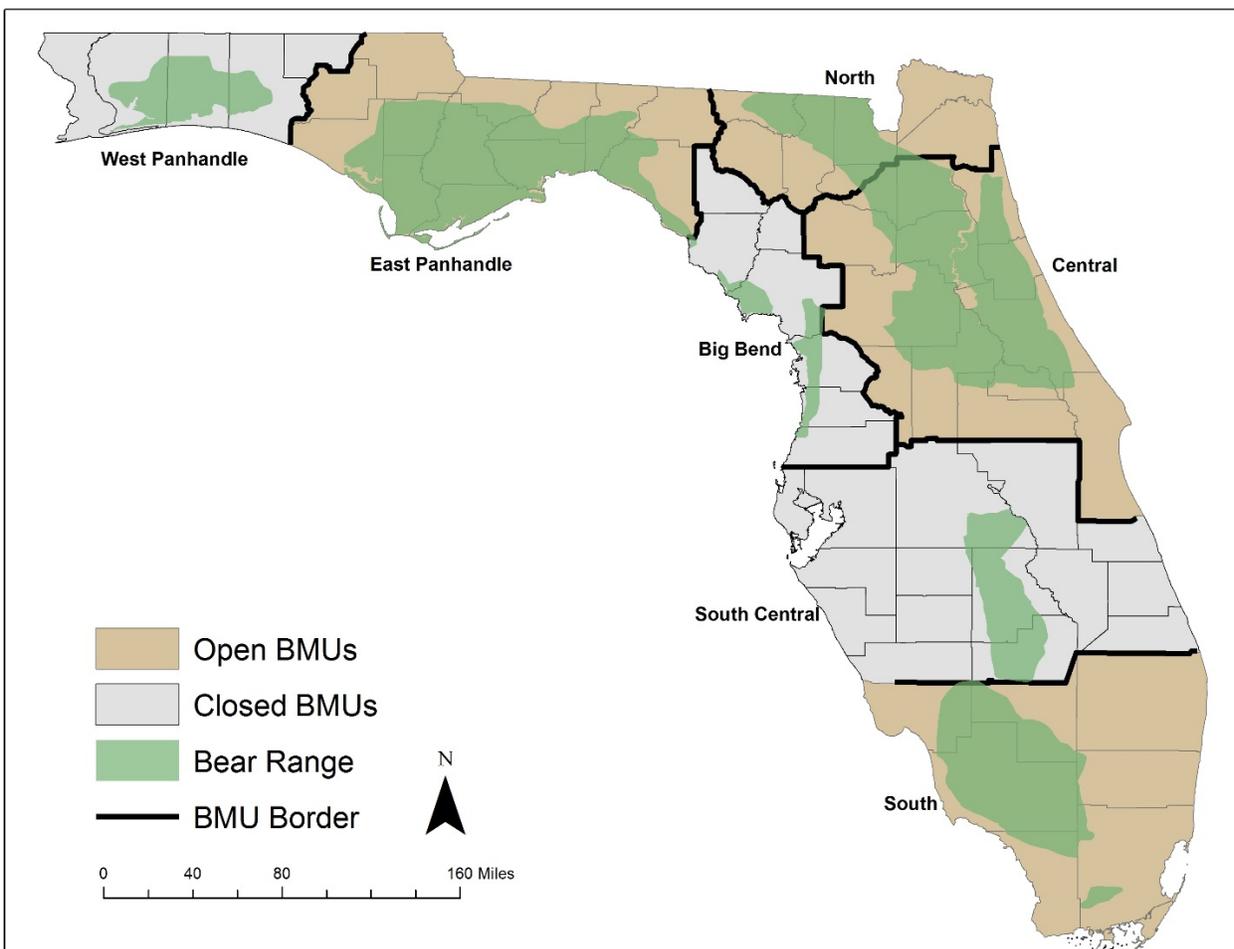


Figure 1. Florida black bear range and 7 Bear Management Units (BMU), where BMUs in gray were closed to the 2015 bear hunt and BMUs in brown were open to the 2015 bear hunt.

Bear Permit Details

Bear permits were available from Aug. 3 to Oct. 23. Permits cost \$100 for residents and \$300 for nonresidents. 3,776 permits were sold, 99 percent (3,724) of which were obtained by Florida residents. While bear management unit (BMU) permits were valid for use in any of the 4 open BMUs, hunters were asked which BMU they planned on hunting. (Figure 2).

Plans call for using proceeds to help fund human-bear conflict prevention through comprehensive waste management efforts in Florida with a focus on bear-resistant trash cans.

Harvest Objectives

FWC took a conservative approach to setting harvest objectives, building in buffers so the number of bears harvested would stabilize growing populations and ensure a continuation of healthy bear numbers. Achieving this goal requires at least 20 percent total annual mortality in each population (the scientifically based minimum rate needed to offset annual reproduction), based on the most recent population estimates from studies in 2002 (East Panhandle and South) and 2014 (North and Central).

Each bear management unit's (BMU) harvest objective was based on taking 20 percent of the BMU population estimate and subtracting the annual known mortality (number of bears killed by vehicle collisions as well as the number of bears removed due to conflict behavior). Because annual mortality numbers vary from year to year, FWC used an average of the last three years of vehicle strikes and conflict-related removals to estimate the nonhunting mortality for 2015.

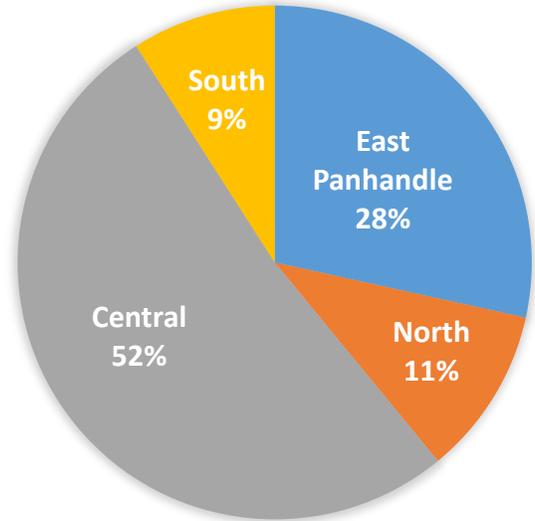


Figure 2. Bear permit holders stated preference of which bear management unit (BMU) they intended to hunt during the 2015 bear hunting

Table 1. Florida black bear population information, harvest objectives, and actual harvest for 4 of 7 Bear Management Units (BMU) that were open for bear hunting in 2015.

Bear Management Unit	Population Estimate (Estimate Year)	20% of Population Estimate	Known Mortality (3 Year Average)	Harvest Objective	Actual Harvest
East Panhandle	600 ('02)	120	80	40	114
North	550 ('14)	110	10	100	25
Central	1,300 ('14)	260	160	100	143
South	700 ('02)	140	20	80	22
TOTALS	3,150	630	270	320	304

FWC monitored the harvest on a daily basis and had the ability to close the season via a daily cut-off mechanism. When the 2015 harvest numbers approached the statewide harvest objective of 320, FWC was prepared and stopped the hunt. The East Panhandle and the Central bear management units (BMUs) were closed for the rest of the season beginning Sunday, Oct. 25, while the North and South BMUs were closed to hunting beginning Monday, Oct. 26. The revised total of 304 harvested bears includes bears that were illegally taken or recovered after all check stations had closed.

While harvest was higher than expected in the East Panhandle and Central BMUs, the statewide total was not exceeded. The 2015 bear hunt's higher-than-expected first-day harvest totals in the East Panhandle and Central Bear Management Units (BMUs) were the result of several factors. The high numbers in the East Panhandle BMU are indicative of a larger bear population than the 2002 estimate of 600 bears that was used to set the conservative harvest objective. Also, the hunt structure (one-day cutoff) combined with the high level of attention created a sense of urgency for hunters, compressing the hunting pressure into a single day instead of spreading it out over several days. Favorable weather and high hunter participation also contributed to faster-than-predicted harvest.

Harvest Details

Harvest was spread across 26 counties during the 2015 bear season with a majority (78 percent) of bears taken on private lands (Table 2 and Figure 3).

Table 2. Bear harvest by Bear Management Unit, county, and private versus public lands for the 2015 bear hunting season.

Bear Management Unit	County	Harvest Number	Harvest Location			
			Private		Public	
			#	%	#	%
East Panhandle	Bay	13	13	100%	0	0%
	Calhoun	19	19	100%	0	0%
	Franklin	12	11	92%	1	8%
	Gadsden	1	1	100%	0	0%
	Gulf	11	11	100%	0	0%
	Jefferson	5	5	100%	0	0%
	Leon	10	9	90%	1	10%
	Liberty	24	23	96%	1	4%
	Madison	1	1	100%	0	0%
	Taylor	2	2	100%	0	0%
	Wakulla	16	16	100%	0	0%
	BMU TOTAL	114	111	97%	3	3%
North	Baker	6	3	50%	3	50%
	Columbia	6	4	67%	2	33%
	Hamilton	13	13	100%	0	0%
	BMU TOTAL	25	20	80%	5	20%
Central	Brevard	2	2	100%	0	0%
	Clay	6	6	100%	0	0%
	Flagler	3	3	100%	0	0%
	Lake*	36	29	81%	6	17%
	Marion*	55	13	24%	41	75%
	Orange	1	1	100%	0	0%
	Putnam	14	5	36%	9	64%
	Seminole	4	4	100%	0	0%
	St. Johns	1	1	100%	0	0%
	Volusia	21	21	100%	0	0%
	BMU TOTAL	143	85	59%	56	39%
South	Collier	16	15	94%	1	6%
	Hendry	6	6	100%	0	0%
	BMU TOTAL	22	21	95%	1	5%
STATEWIDE TOTAL*		304	237	78%	65	22%

*Land ownership was unknown for one bear in both Marion and Lake counties

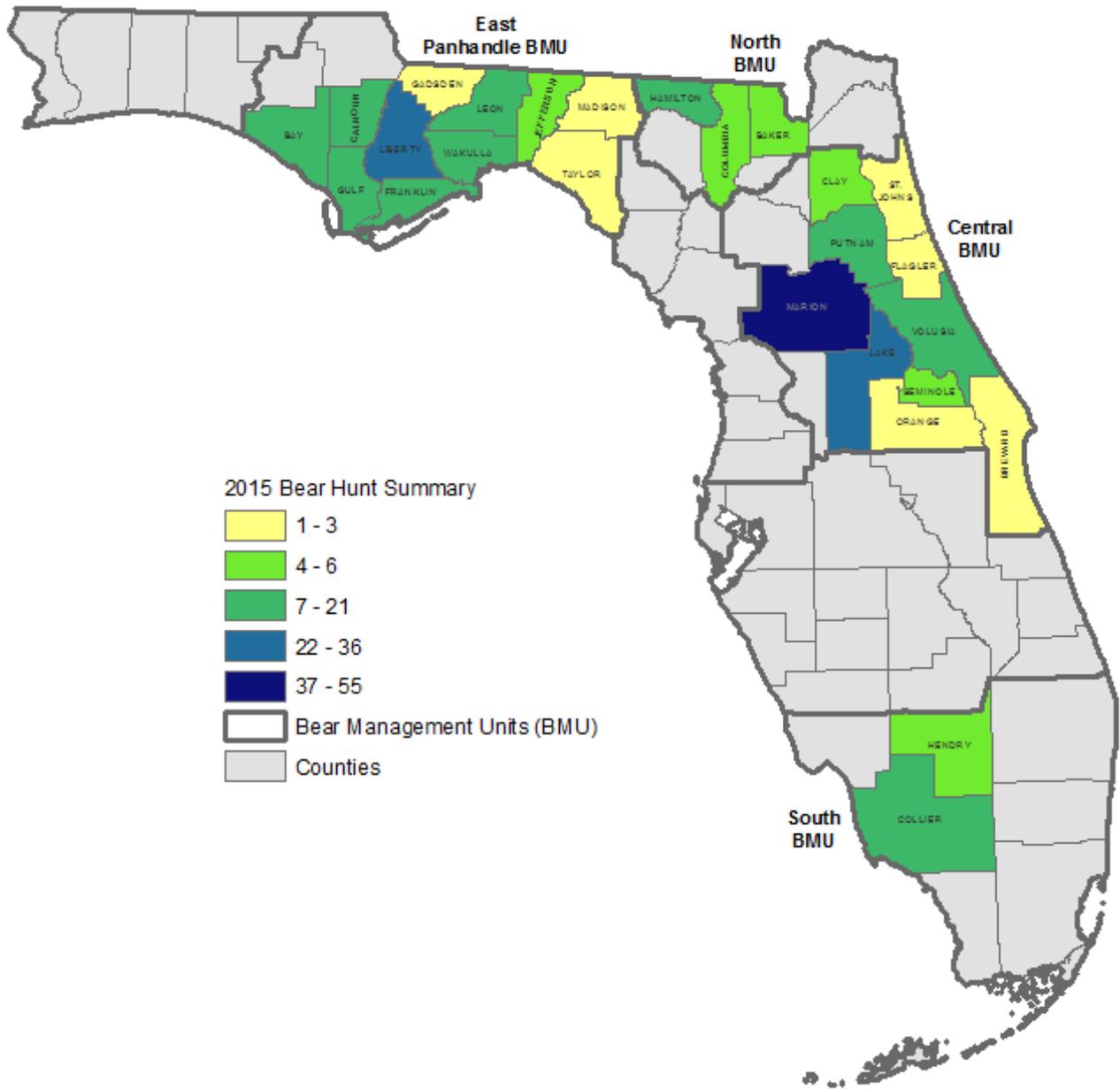


Figure 3. Bear harvest by county for the 2015 Florida black bear hunting season.

There were 46 wildlife management areas in the 4 BMUs that were open for hunting during the 2015 bear season. Bears were harvested on 7 wildlife management areas, with the majority (83 percent) taken on Ocala National Forest (Table 3).

Table 3. Bear harvest on Wildlife Management Areas for the 2015 bear hunting season.

Wildlife Management Area	Harvest	% of harvest on public lands
Apalachicola	2	3.1%
Ocala	54	83.1%
Osceola	5	7.7%
Picayune Strand	1	1.5%
Rock Springs Run	1	1.5%
Seminole	1	1.5%
Tate's Hell	1	1.5%
TOTAL	65	100.0%

59 percent of harvested bears taken throughout the state were females. (Table 4). The average weight of harvested female bears was 180 pounds, and the heaviest female weighed 371 pounds. The average weight of male bears harvested was 229 pounds, and the heaviest male weighed 547 pounds. Field dressed bears were not included.

Table 4. Bear harvest information by Bear Management Unit for the 2015 bear hunting season.

Bear Management Unit	Number (#) & Percent (%)	Male	Female	Total
East Panhandle	#	47	67	114
	%	41%	59%	100%
North	#	11	14	25
	%	44%	56%	100%
Central	#	58	85	143
	%	41%	59%	100%
South	#	10	12	22
	%	45%	55%	100%
TOTAL	#	126	178	304
	%	41%	59%	100%

To stabilize large and growing bear populations in four of the state's seven bear management units, bears of either sex were allowed to be taken during the hunt. Regulations stipulated that the bear must weigh at least 100 pounds (live weight) and cubs must not be present. While juvenile bears can survive on their own, FWC's regulation reduced the incidence of females with cubs being taken. The percentage of female bears taken during the hunt that were lactating was 21 percent.

Female bears reproduce every other year after they reach 3 to 4 years of age, and can produce 1 to 5 cubs (an average litter is 2 cubs). Therefore, roughly half the females of a bear population in any given year will be lactating. Numerous studies support that, while cubs usually stay with the female until their second summer, they are old enough to survive on their own once they reach 5 ½ to 8 months of age.

FWC selected the timing of this hunt to ensure cubs, which are born in late January or early February, would be 8 to 9 months old and thus able to survive on their own. Several studies support independent cub survival, including a peer-reviewed scientific study published in the *Journal of Wildlife Management*. This study showed that cubs as young as 5 ½ months old survive on their own at similar rates as cubs of the same age with females.

Law Enforcement

FWC Division of Law Enforcement continues to investigate cases concerning violations that may have occurred during the recent bear hunt. A number of warnings and two misdemeanor citations were issued during the bear hunt. Overall, hunter compliance with regulations was high.

Summary

FWC staff took a conservative approach to reinstating a limited bear hunt in Florida that was scientifically based and carefully regulated to ensure the level of harvest was completely sustainable while achieving the goal of stabilizing large, growing bear populations. Updated population information for three additional bear management units is expected in 2016, and information from the 2015 hunt will be used to guide management efforts in subsequent years. The hunt is one component of FWC's overall bear management strategy, and FWC will continue to invest time and resources in efforts such as outreach and education, waste management, and removing bears that pose a threat to human safety.