

Executive Summary (DRAFT)

Felsenthal NWR Deer Harvest Report for the 2019-2020 Season

As of December 16, 2019, 394 deer were harvested and either checked at a staffed-check station or checked through AGFC's phone or online system. Deer checked with archery equipment accounted for 41% (162) of the total 394. During the 2019/2020 lottery modern gun and muzzleloader hunts, 232 deer were harvested and checked. This was slightly lower than the 289 harvested and checked during the previous year. During the muzzleloader hunt, 68 deer were harvested and checked and during the gun, 164 were harvested and checked. The doe first rule and 2-deer bag limits were continued. The muzzleloader and modern gun hunts were both lottery hunts with 500 permits available for each hunt. Of the 500 permits available, 431 were filled for the muzzleloader hunt and 500 for the gun. The muzzleloader hunt was a 5-day hunt from October 19-23 and the gun hunt was a 4-day hunt from November 9-12.

Of the 431 permits claimed for the muzzleloader hunt, 353 (82%) were Arkansas residents and 73 were from Louisiana, and 5 were from a combination of AL, MS, FL, and TX. Of the 353 Arkansas residents, 189 (54%) were from the tri-county area (local) and 164 were considered non-local. Of the 500 claimed modern gun permits, 356 (71%) were Arkansas residents and 139 were Louisiana residents and 5 were from a combination of AL, MS, and TX. Of the 356 Arkansas residents, 139 (39%) were locals and 217 were non-locals.

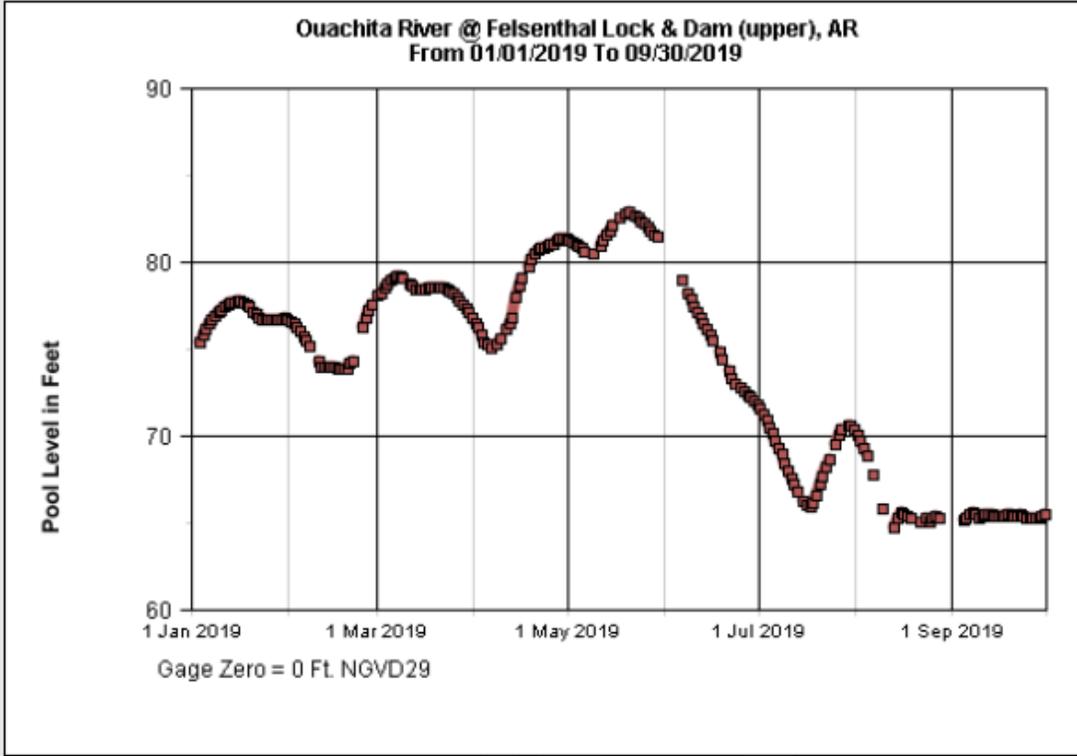
Of the 232 deer harvested during both lottery hunts, 68 bucks and 164 were doe were harvested, with a 2.4:1 doe to buck sex ratio. This year's harvest was lower than last year and lower than the 5-year average.

In general and as expected, harvest totals were higher among younger deer (0.5-2.5). Only 18% of the bucks harvested, were greater than 2.5 years of age, which would be expected to be higher for increasing antler mass. Average weights ranged from 2% to 13% lower than the 5-year average for the 1.5 and 2.5 year age classes depending on sex and age class.

Lactation rates among 2.5-4.5 year-old deer were much lower this year, ranging from 46% to 70%. Interestingly, highest lactation rates were among the 4.5 year age class (70%). These percentages are an indication that deer remain in good condition despite below average environmental conditions.

Harvesting around 300 doe across 50,000 huntable refuges acres would be 1 doe per 167 acres. These values fall within the general rule for harvesting 1 doe per 100 to 200 acres to maintain a health population.

Environmental conditions could be linked to the decrease in deer weights, harvest numbers, lactation rates, and antler development. In 2019, river levels peaked at 83 ft msl and remained high throughout the growing season, a critical time for fawn health and buck antler development. Water receded from the bottomland area during the second week in August. This likely caused issues with the recolonization of deer into the bottomland habitat, further impacting the ability to acquire quality nutrition.



DRAFT

Felsenthal NWR White-tailed Deer Harvest Summary for the 2019-2020 Season

Archery (September 28, 2019-January 31, 2020)

	2017		2018		2019	
	Harvest #	%	Harvest #	%	Harvest #	%
Male	20	16%	<i>Data not Available</i>		20	12%
Female	108	84%			142	88%
Total Harvest	128				162	

Muzzleloader Lottery Hunt (October 19-23, 2019)

	2017		2018		2019	
	Harvest #	%	Harvest #	%	Harvest #	%
Male	9	13%	9	10%	13	19%
Female	61	87%	85	90%	55	81%
Total Harvest	70		94		68	

Gun Lottery Hunt (November 9-12, 2019)

	2017		2018		2019	
	Harvest #	%	Harvest #	%	Harvest #	%
Male	78	36%	77	39%	55	34%
Female	138	64%	118	61%	109	66%
Total Harvest	217		195		164	

2019/2020 Season Total (Lottery only)

	Harvest #	%	Ratio	5-year Average
Male	68	29%		74
Female	164	71%		173
Total Harvest	232		2.4:1	247

Harvest Totals by County

	Ashley	Bradley	Union
Male	5	31	32
Female	21	53	90
Total Harvest	26	84	122

Tables below contain data from lottery hunts only

Harvest Totals and Average Weight by Age Class

	Age Class	#	%	Weight (whole)lbs	5-year Average (lbs)
Male	0.5	5	8%	56	
	1.5	16	24%	85	91
	2.5	35	51%	132	137
	3.5	6	9%	146	
	4.5	3	4%	170	
	5.5	2	3%	161	
	5.5+	1	1%	153	
Female	0.5	22	13%	51	
	1.5	45	28%	73	84
	2.5	51	30%	93	95
	3.5	25	15%	101	
	4.5	10	6%	104	
	5.5	4	3%	96	
	5.5+	7	4%	97	

Percent Lactation

		2017	2018	2019
Female	2.5	85%	71%	46%
	3.5	91%	69%	58%
	4.5	89%	89%	70%

Antler Characteristics

	2017	2018	2019
Age Class	# > 130 B&C	# > 130 B&C	# > 130 B&C
3.5	2	1	
4.5	5	5	
5.5	2	1	
5+	1	3	1
Total	10	10	1

Historical Data

