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GAME HARVEST AND HUNTER USE CAMP A. P. HILL, BOWLING GREEN, VIRGINIA

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INTRODUCTION

Termed the show place of the Second Army from the hunting view point, Camp A. P. Hill is an excellent example of multiple use of military areas. With a two-deer, one of which may be a doe, bag limit it has produced and sustained a high deer kill and a high hunter use during the period for which records are available.

HISTORY

Camp A. P. Hill was established in 1940-41 as an Army training camp from 76,795 acres of farm land in Caroline County near Bowling Green, Virginia of which approximately 18% was open farm land. During World War II and until 1946 the area was utilized to train approximately 70,000 troops yearly. From 1946 to the present it has been training from 50,000 to 60,000 yearly of the active Army, Air Force, Marine Corps troops, National Guard and Army Reserves.

The first records available show that the camp was open to hunting in 1954-55 by written permit only. However, there was limited hunting permitted as early as 1946 but no records were kept.

In 1958 a cooperative agreement was initiated between the Commission of Game and Inland Fisheries of the Commonwealth of Virginia and the Second Army for the management of the game resources on the post and became effective March 3, 1959. This is one of the first cooperative agreements between a military base and a state game agency and was the second agreement in Virginia with the Second Army. Camp Pickett was the first. The Second Army has been most cooperative and outstanding working relations have existed. Through this program the Virginia Game Commission furnishes technical assistance and law enforcement, as well as labor, equipment and supplies for improving habitat and management of the posts' wildlife. The Camp A. P. Hill command administers the hunting by use of written permits, an excellent check in and out system and by assignment of the hunters to designated areas.

In contrast to most areas in Virginia there has been a two-deer, one of which may be a doe, bag limit since the area was opened to public hunting.

DESCRIPTION OF CAMP

The camp is divided into twelve hunting areas. At present about 5,000 acres are in open areas, headquarters, campsites, training fields, roads, right-of-ways and air strips and the remainder is in forest and abandoned farm land. The reservation is open to hunting except for the headquarters, campsites and administrative areas. Total acreage available for hunting is 76,663 acres. Areas 1 through 8, comprising about 53,000 acres, are available for hunting to service personnel and the general public except when training exercises are in progress in an area. Areas 9 through 12, known as the Range or Impact Area, are made available on a limited basis. Hunting in the latter areas is by organized drives guided by Installation or Range personnel. Unguided hunters are not permitted in these areas because of the danger due to firing ranges and active dud areas.

GAME MANAGEMENT WORK

The majority of the management work has been directed toward white-tailed deer habitat improvement. Approximately three hundred acres of fire lanes, road shoulders and food patches have been planted to clovers and small grains and about 1,000 acres have been improved by disking and mowing since the cooperative agreement was instituted in 1959. This year small game habitat improvement was increased and it is expected that the small game harvest, especially doves, should show marked improvement.

Forest management practices started in 1953 have improved browse conditions. Approximately 163,000 cord of pine pulp and five million board feet of hardwoods have been sold from selective and thinning cuttings on a small percent of forest land. Merchantable timber includes 28,400 acres of pure pine, 65% Virginia pine and 35% loblolly, 26,300 acres of mixed pine hardwood and 7,260 acres of pure hardwoods. About 11,000 acres in the impact area are considered unmerchantable and are mostly shrubby hardwoods. In the range and impact areas 5,000 to 6,000 acres are burned annually with about half of this acreage being set intentionally to control accidental range fires. Many of these fires occur at times which are detrimental to wildlife. A prescribed burning program is being planned.

HUNTING REGULATIONS

From 1954 to 1962 all hunters were required to obtain written permits from the Commanding Officer of Camp A. P. Hill in addition to the licenses required by Virginia. Written permits were required for the first two weeks of the 1962-63 season. The remainder of the 1962-63 season hunting was permitted on a first-come-first-served basis. Seasons and bag limits conform with Virginia regulations for Caroline County.

All hunters are required to check in daily at the checking station for a hunter safety briefing, a daily permit and auto pass, and assignment to hunting areas depending on the military mission, size of the area and type of hunting. A maximum of 750 hunters per day or about one hunter per 100 acres are permitted on the area. At the end of hunting each day, all hunters return permits, check out and report and check game killed.

HUNTING TECHNIQUES

The majority of the hunting pressure on the reservation is directed against deer. All deer hunting is without the use of dogs. Legal weapons for deer are shot guns with buckshot or slugs and bow and arrow. Organized drives in Areas 9 through 12 are arranged by the Post Command and are guided by service personnel familiar with the areas. In the remaining areas, 1 through 8, deer hunting may be by stalking, still hunting or by driving. Man drives account for the majority of the kill on A. P. Hill.

Turkey hunting is considered incidental because there are few dedicated turkey hunters who use the area and the majority of turkeys are killed by deer hunters. Small game hunting is limited because of the heavy concentration of deer hunters and relatively small amount of open land. As with turkeys most of the small game is killed by deer hunters. The small game kill records are questionable because the game did not have to be tagged as did turkeys and deer

HUNTER USE AND GAME HARVEST

The hunting pressure has had a phenomenal increase (Table 1) from 1,500 man-days in 1954-55 to 12,220 in 1961-62, an increase of 816% in seven years. No record is available of the breakdown of service and non-service for the first three years. It should be noted that in 1957-58 almost two out of three hunters were servicemen while in 1961-62 and 1962-63 only about three out of ten were servicemen.

No record is available of the percentage of out-of-state hunters but the deer kill tags checked for the last season, 1962-63 (Table 2), showed 261 of 1,095 deer were killed by out-of-state hunters giving a hunter

success of approximately one non-resident to four residents. Successful non-resident hunters came from seven states and Washington, D. C. with the majority from Maryland. Service personnel stationed in Virginia are considered residents.

Table 1. Hunter Days 1954-1963
Camp A. P. Hill

Year	Total	Service	Non-Service
1954-55	1,500		
1955-56	2,300		
1956-57	3,774		
1957-58	7,800	4,839	2,961
1958-59	8,995	5,292	3,703
1959-60	11,991	5,235	6,756
1960-61	11,652	5,126	6,526
1961-62	12,220	3,760	8,460
1962-63	10,929	3,200	7,729
Total	68,861	27,452	36,135

Table 2. Deer Kill 1962-63 by State
Camp A. P. Hill

Kentucky	4
New Jersey	4
New York	11
North Carolina	15
Maryland	115
Ohio	11
Pennsylvania	42
Washington, D. C.	59
Out of State	261
Virginia (Residents)	834
Total	1,095

With the tremendous increase in hunting pressure the deer kill has also increased (Table 3) from 238 in 1954-55 to a high in 1960-61 of 1,874, an increase of 788% in six years. This kill was the peak kill. The 1961-62 and 1962-63 kills leveled off at near 1,100 per year.

Table 3. Deer Kill 1954-63
Camp A. P. Hill

Year	Total	Male	Female
1954-55	238	107	116
1955-56	287	164	123
1956-57	574	286	288
1957-58	929	475	454
1958-59	959	454	505
1959-60	1,076	476	600
1960-61	1,874	827	1,047
1961-62	1,186	519	667
1962-63	1,095	498	587
Total	7,931	3,249	3,860

A check of the limited records available and inquiries of local residents revealed that there was an exceptional mast crop of red and white oak on A. P. Hill in the fall of 1959 and Eastern Virginia had the best mast crop in twenty years. With excellent food available the fawn crop was high and the kill for 1960-61 took a jump. A check of the one and one-half year-old bucks (Table 4) indicates that the weights were up and

the percentage of spikes were the lowest recorded. The 1961-62 kill dropped back to about 1,100 deer and held about the same for 1962-63. However, the average weights for yearling bucks dropped to a low of seventy pounds and the percent of spikes climbed to 85%, indicating that the condition of the herd was deteriorating. Browse has appeared to be adequate but of very poor quality for the past two years.

Table 4. Yearling Buck Average Weights and Percentage Spikes
Camp A. P. Hill

Year	Average Weights	Percentage Spikes	Sample Size
1958-59	87 lbs.	87%	8
1959-60	81 lbs.	73%	11
1960-61	90 lbs.	33%	42
1961-62	None taken		
1962-63	70 lbs.	85%	39

The turkey kill (Table 5) has varied from 16 to 80 with no set pattern. Small game kills (Table 6) have varied from year to year except rabbits which showed a steady rise until 1959-60 and then a sharp decline.

Table 5. Turkey Kill 1956-63
Camp A. P. Hill

Year	Total	Male	Female	Spring Gobbler Season Following
1956-57	24			
1957-58	30	12	18	
1958-59	16	10	6	
1959-60	80	42	38	
1960-61	51	21	30	5
1961-62	32	11	21	5
1962-63	53	17	36	5
Total	286	113	149	15

Table 6. Small Game Kill 1957-63
Camp A. P. Hill

Year	Rabbit	Squirrel	Quail	Duck	Fox	Dove
1957-58	1,049	209	181	11	2	
1958-59	1,494	382	429	20		
1959-60	1,562	818	472	11	2	
1960-61	635	289	862	3	2	
1961-62	374	95	412		2	
1962-63	194	309	273	13	1	66
Total	5,308	2,102	2,629	58	9	66

In determining hunter success for deer (Table 7) it was assumed that all hunters were hunting deer as no breakdown was available. Although this is not exactly true, it shows a relatively high hunter success for deer hunting in Virginia. It is estimated that approximately fifteen man-days are spent for each deer killed in Virginia.

HUNTING POTENTIAL

Located as Camp A. P. Hill is, near Richmond and Fredericksburg and within a two-hour drive of the tremendous Metro-Washington, D. C. complex and about three hours from Hampton Roads, the potential hunting pressure growth is phenomenal. It is expected the hunter days per season will continue above 10,000 per season and probably will increase again.

With the continued excellent cooperation between the Second Army

Table 7. Hunter Success in Days Per Deer Kill 1954-63
Camp A. P. Hill

Year	Days Per Kill
1954-55	6.3
1955-56	8.0
1956-57	6.52
1957-58	8.40
1958-59	9.38
1959-60	11.14
1960-61	6.23
1961-62	10.31
1962-63	10.06
Average	8.48

and the Commission of Game and Inland Fisheries in management of the game resources on A. P. Hill a kill of 1,000 to 1,500 deer should continue each year.

In addition to hunting the area has six lakes and twenty-odd beaver ponds which produce good bass, crappie, perch, pickerel and bream and provide about 2,500 man-days of fishing each year.

CONCLUSIONS

In conclusion the following points are stressed:

1. A good deer kill of either sex can be maintained over a long period of time regardless of the doe kill and with a most liberal deer season with few controls on hunting.
2. A military post while operating as a troop training base now sustains high hunting and fishing pressure for the public.
3. Federal-State cooperation of hunting and fishing is for the benefit of the public.

ACKNOWLEDGMENTS

The writer wishes to thank Lt. Colonel Arthur C. Harris and Lt. Colonel Edward R. Stevens for making available hunter use and kill records of Camp A. P. Hill, C. H. Shaffer and J. V. Gwynn of the Game Commission for their assistance in editing and supplying information on Virginia kill records and my wife for the many times she had to retype this paper.

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