



Cooperator Ruffed Grouse Hunting Log Results from the 2004-05 Season



Introduction

During the 2004-05 ruffed grouse hunting season, DEC launched the Cooperator Ruffed Grouse Hunting Log. This survey asks hunters to record their daily grouse hunting activities including information such as the number of grouse flushed, the number of hours hunted, the number of grouse killed, and if a dog was used to hunt grouse. The primary purpose of the log is to monitor the number of birds flushed per hour. Changes in the flushing rate illustrate trends in the grouse population when viewed over a long period of time and will provide insight into statewide distributions for this popular game species as habitats change both locally and on a landscape scale.

We want to extend a sincere thank you to all the hunters that participated in the Cooperator Ruffed Grouse Hunting Log during the 2004-05 season. With only one year of data it is difficult to draw any strong conclusions about grouse distribution and abundance; however, the inaugural season was an important first step in monitoring grouse populations. Over time, the efforts of participating hunters will help wildlife managers answer questions about the ecology and conservation of ruffed grouse.

Results from the 2004-05 Season

During the inaugural season, 274 hunters participated in the Cooperator Ruffed Grouse Hunting Log. Grouse log participants reported data from over 2,700 hunting trips across the state, from the lower Hudson Valley in the south, to the Adirondacks and St. Lawrence Valley in the north, and the Lake Plains and Allegheny Plateau in far western New York. They spent over 8,000 hours afield and flushed over 6,600 grouse (about 0.8 flushes/hour). Some general findings from the 2004-05 season include:

- Hunters participating in the survey averaged about 31 hours afield during the 2004-05 season. They took just under 11 trips afield for the season and spent about 3 hours afield per trip.
- Grouse log participants averaged about 25 grouse flushed per hunter for the 2004-05 season and had to spend a little over an hour hunting in order to flush one grouse. In addition, hunters averaged about two birds harvested for the season and had to invest about 12.5 hours of hunting effort to harvest one grouse. On average, one out of every 11 grouse flushed was harvested.
- The majority of hunters (about 70%) that participated in the survey used a dog to hunt grouse (Table 1). In general, hunters that used a dog flushed and harvested more grouse and had a higher flushing rate (0.95 grouse flushed/hour) than hunters that did not use a dog (0.70 grouse flushed/hour).
- Just under 70% of the effort expended by hunters occurred during the first half of the season (September - November; Table 2). In addition, over 70% of the grouse flushed and harvested occurred during this early part of the season. In general, the flushing rate decreased as the season progressed (Table 2).
- Effort expended and the number of ruffed grouse seen were similar on public and private

lands (Table 3), but flushing rate was higher on private lands.

- Overall, there was more effort expended in the southern grouse season zone, but the flushing rate was higher in the northern season zone (Table 4).
- Almost half of the hunting effort took place in western New York State (43% Appalachian Hills & Plateau Ecozone, 4% Lake Plains Ecozone). The highest number of grouse were flushed and harvested in the Appalachian Hills & Plateau Ecozone, followed by Catskills-Delaware Hills Ecozone, and the Adirondacks-Tug Hill Ecozone (Table 5; see Figure 1 for regions referred to here).
- The flushing rate was highest in the Champlain Valley Ecozone (1.35 grouse flushed/hour), followed by the Adirondacks-Tug Hill Ecozone (1.14 grouse flushed/hour), and the Catskills-Delaware Hills Ecozone (1.00 grouse flushed/hour; Table 5, Figure 1). The flushing rate was similar among the St. Lawrence Valley, Lake Plains, and Appalachian Hills and Plateau ecozones (about 0.8 grouse flushed/hour), and was lowest in the Mohawk Valley-Hudson Valley-Taconic Highlands Ecozone (0.61 grouse flushed/hour).

Table 1. 2004-05 Cooperator Ruffed Grouse Hunting Log data by hunting method (with dog vs. without).

	Hunted <i>with</i> Dog		Hunted <i>without</i> Dog	
	#	%	#	%
Number of Trips	1,952	70.4	822	29.6
Number of Hours	5,478	67.4	2,656	32.7
# Grouse Flushed	4,997	75.6	1,612	24.4
# Grouse Harvested	465	78.2	130	21.9
Flushing Rate \pm SE^{a,b} (flushes/hour)	0.95 \pm 0.03		0.70 \pm 0.04	

^aSE = Standard Error

^b Overall flushing rates are calculated as an average flushing rate for all hunting days, not a simple division of the total number of grouse flushed by the total number of hours hunted.

Table 2. 2004-05 Cooperator Ruffed Grouse Hunting Log data by month.

Month	# of Trips	% of Total	# of Hours	% of Total	# Grouse Flushed	% of Total	# Grouse Harvested	% of Total	Flushing Rate \pm SE^{a,b} (flushes/hour)
September	56	2.0	139	1.7	179	2.7	19	3.2	1.22 \pm 0.16
October	1,221	43.9	3,618	44.4	3,156	47.7	253	42.4	0.92 \pm 0.03
November	574	20.6	1,882	23.1	1,519	22.9	160	26.8	0.87 \pm 0.04
December	300	10.8	812	10.0	637	9.6	57	9.6	0.87 \pm 0.07
January	321	11.5	822	10.1	515	7.8	45	7.5	0.74 \pm 0.06
February	311	11.2	882	10.8	616	9.3	63	10.6	0.80 \pm 0.10

^aSE = Standard Error

^b Overall flushing rates are calculated as an average flushing rate for all hunting days, not a simple division of the total number of grouse flushed by the total number of hours hunted.

Table 3. 2004-05 Cooperator Ruffed Grouse Hunting Log data by land (public vs. private).

	Public Land		Private Land	
	#	%	#	%
Number of Trips	1,468	53.1	1,298	46.9
Number of Hours	4,467	55.0	3,649	45.0
# Grouse Flushed	3,477	52.8	3,115	47.3
# Grouse Harvested	286	48.2	308	51.9
Flushing Rate \pm SE^{a,b} (flushes/hour)	0.79 \pm 0.03		0.98 \pm 0.04	

^a SE = Standard Error

^b Overall flushing rates are calculated as an average flushing rate for all hunting days, not a simple division of the total number of grouse flushed by the total number of hours hunted.

Table 4. 2004-05 Cooperator Ruffed Grouse Hunting Log data by DEC grouse season zone (northern vs. southern).

	Northern Zone		Southern Zone	
	#	%	#	%
Number of Trips	599	21.5	2,184	78.5
Number of Hours	1,738	21.3	6,417	78.7
# Grouse Flushed	1,899	28.7	4,723	71.3
# Grouse Harvested	178	29.8	419	70.2
Flushing Rate \pm SE^{a,b} (flushes/hour)	1.08 \pm 0.05		0.82 \pm 0.03	

^a SE = Standard Error

^b Overall flushing rates are calculated as an average flushing rate for all hunting days, not a simple division of the total number of grouse flushed by the total number of hours hunted.

Table 5. 2004-05 Cooperator Ruffed Grouse Hunting Log data by ecozone.

Ecozone^a	# of Trips	% of Total	# of Hours	% of Total	# Grouse Flushed	% of Total	# Grouse Harvested	% of Total	Flushing Rate \pm SE^{b,c} (flushes/hour)
Adirondacks - Tug Hill	261	9.6	863	10.9	986	15.4	89	15.5	1.14 \pm 0.08
Appalachian Hills & Plateau	1,148	42.4	3,385	42.6	2,471	38.6	217	37.9	0.83 \pm 0.04
Catskills - Delaware Hills	417	15.4	1,277	16.1	1,264	19.8	120	20.9	1.00 \pm 0.06
Champlain Valley	105	3.9	280	3.5	348	5.4	28	4.9	1.35 \pm 0.15
Lake Plains	149	5.5	344	4.3	271	4.2	13	2.3	0.81 \pm 0.10
Mohawk Valley - Hudson Valley - Taconic Highlands	486	18.0	1,442	18.1	726	11.3	69	12.0	0.61 \pm 0.05
St. Lawrence Valley	142	5.2	357	4.5	335	5.2	37	6.5	0.89 \pm 0.07

^a Ecozones are an aggregation of Wildlife Management Units. The Coastal Lowlands Ecozone (New York City and Long Island) does not have a ruffed grouse season, thus is not listed.

^b SE = Standard Error

^c Overall flushing rates are calculated as an average flushing rate for all hunting days, not a simple division of the total number of grouse flushed by the total number of hours hunted.

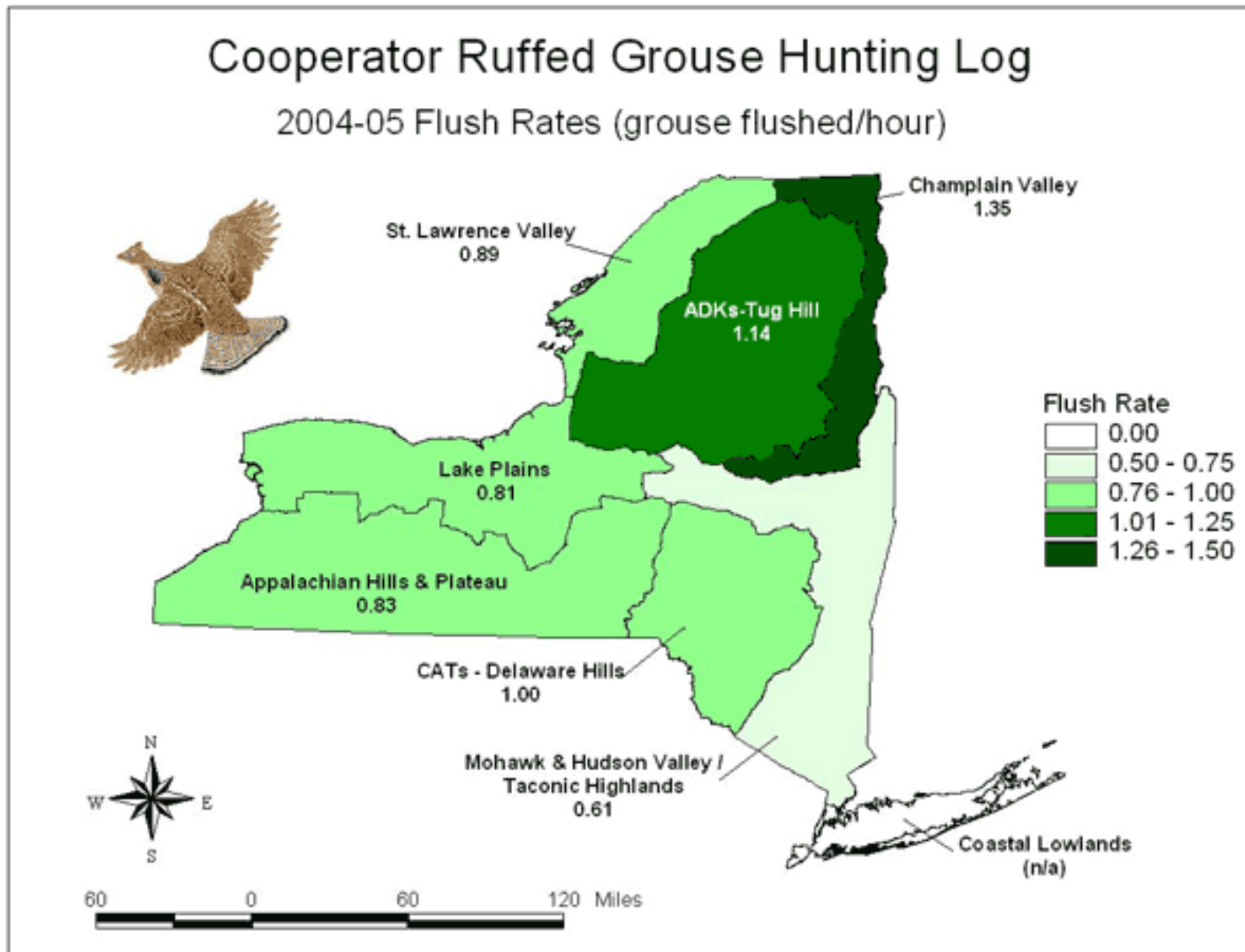


Figure 1. Flushing rate (grouse flushed/hour) by ecozone based on 2004-05 Cooperator Ruffed Grouse Hunting Log data.