

Small Game Harvest 2020-21

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Abstract

The number of licensed small game hunters increased 9.1% in 2020-21 small game hunting season from 2019-20 levels. The estimated harvest decreased from last season for bobwhite quail, cottontail, gray fox, mourning dove, pheasant, raccoon, red fox, and woodchuck and increased for coyote, crow, gray partridge, ruffed grouse, snowshoe hare, squirrel and woodcock (Table 2). The number of days afield pursuing small game was 1.68 million, up from the 1.52 million observed during the 2019-20 season.

Methods

A sample of survey names was drawn from 2020-21 sports, small game, senior citizen small game, junior small game, and conservation patron license holders in proportion to the license sales for each county. Ten thousand surveys were mailed in early February. Surveys asked recipients for information on whether they hunted, with they used a dog, type of dog used, species harvested, number of days hunting each species, and county of harvest for each species. These data were entered into the DNR production server and analyzed using the Statistical Analysis System (SAS).

Results

Responses were received from 3,108 of the hunters surveyed. The corrected response rate was 31%. Hunters who had authority to pursue small game in 2020-21; 51.5% did pursue at least one small game animal during the season. Just under 50% of the licensed small game hunters used a dog during the season. Those that hunted with a dog own an average of 1.4 dogs. Most dogs were used to hunt game birds (59%). The most used dog was the Labrador Retriever (36%). On average hunter's spent 50 days afield either training or hunting with their dog. Hunters spend an average of \$917.25 on dog maintenance per dog owned (Table 1).

The number of people who bought small game, sportsman, senior citizen small game, non-resident small game, 5-day non-resident small game, or conservation patron licenses increased from 219,780 in 2019-20 to 239,754 in 2020-21 (Figure 1). Hunters spent approximately 1.68 million days in the field during the 2020-21 small game season, an 11% increase from the previous year. The estimated harvest increased from last season for all species except bobwhite quail, cottontail, gray fox, mourning dove, pheasant, raccoon, red fox, and woodchuck which saw decreases (Table 2). Some of the increases in license sales and days afield were probably due to the Covid-19 restrictions and the public's desire to be out of doors. License sales and participation were up for most types of hunting and fishing activities as most other events were either restricted or canceled.

Small game hunters who pursued pheasants did so mostly on public land (57%). Seventy-three percent of land used to pursue pheasants was stocked with pen-reared pheasants (either by the DNR or privately, Table 1).

No corrections are made for response or prestige bias. Therefore, the harvest estimates for some of the less hunted species (bobwhite quail, gray partridge, and gray fox,) are probably less accurate. Small sample size can also influence the results of the counties of highest harvest. Because of this, counties of highest harvest should be viewed with caution. The thirty-eight-year trend in small game harvest for all species is shown in Figure 2.

Table 1. Responses to the 2020-21 Wisconsin Small Game Hunting Questionnaire.

Question 1. Did you hunt small game (excluding waterfowl) in Wisconsin during this season?

Response	Count	Percent
Yes	1,626	51.5%
No	1,531	44.5%

No Response = 23

Question 2. Did you use dogs while hunting small game?

Response	Count	Percent
Yes	755	46.7%
No	860	53.3%

No Response = 1,565

Question 3. Which of the following did you hunt with the aid of dogs?

Response	Count	Percent
Game Birds	437	58.6
Migratory Game Birds (excluding waterfowl)	153	20.5
Small Game Mammals	98	13.1
Furbearing Animals	47	6.3
Unprotected	8	1.1
Other	3	0.4

Question 4. What breed(s) and number of dogs did you use?

Breed	Count	Percent	Breed	Count	Percent
American Water Spaniel	4	0.5%	Irish Setter	1	0.1%
Australian Shepherd	1	0.1%	Lab	315	36.0%
Beagle	44	5.0%	Lab Mix	14	1.6%
Black & Tan	3	0.3%	Llwellyn Setter	6	0.7%
Blue Tick	11	1.3%	Mastiff	1	0.1%
Boxer	1	0.1%	Mix	21	2.4%
Boykin Spaniel	1	0.1%	Mountain Cur	2	0.2%
Brittany	38	4.3%	Munsterlander	6	0.7%
Chesapeake Bay	7	0.8%	Nova Scotia Duck Tolling	2	0.2%
English Cocker Spaniel	15	1.7%	Plott Coonhound	8	0.9%
English Pointer	6	0.7%	Poodle	2	0.2%
English Setter	36	4.1%	Red Setter	2	0.2%
English Springer Spaniel	16	1.8%	Redbone Coonhound	6	0.7%
German Shorthaired	109	12.5%	Spinone Italiano	1	0.1%
German Wirehaired	33	3.8%	Springer Spaniel	37	4.2%
Golden Retriever	40	4.6%	Terrier	2	0.2%
Gordon Setter	6	0.7%	Trigg Hound	1	0.1%
Great Dane	1	0.1%	Vizsla	10	1.1%
Griffon	20	2.3%	Walker	27	3.1%
Hound	8	0.9%	Weimaraner	11	1.3%

Mean Number of dogs owned = 1.4 Dogs per owner

Question 5. Approximately how many hours did you (or others), spend training each dog used?

Mean = 115.2 Hours

Question 6. Approximately how many days per year do you use your dog(s) in the field (training and hunting)?

Mean = 49.5 Days

Question 7. Approximately how much money do you spend annually on maintenance per dog?

Mean = \$917.25

Question 8a. Which statement best represents the type of land you did MOST of your pheasant hunting on?

Response	Count	Percent
Exclusively Private Land	112	20.1%
Mostly Private Land	26	4.7%
Mix of Private and Public Land	101	18.2%
Mostly Public Land	97	17.5%
Exclusively Public Land	220	39.6%

Question 8b. Was the land you hunted on stocked with pen-reared pheasants (either by the DNR or privately)?

Response	Count	Percent
Yes	363	72.5%
No	76	15.2%
Don't know	62	12.4%

No Response = 63

Small Game License Sales

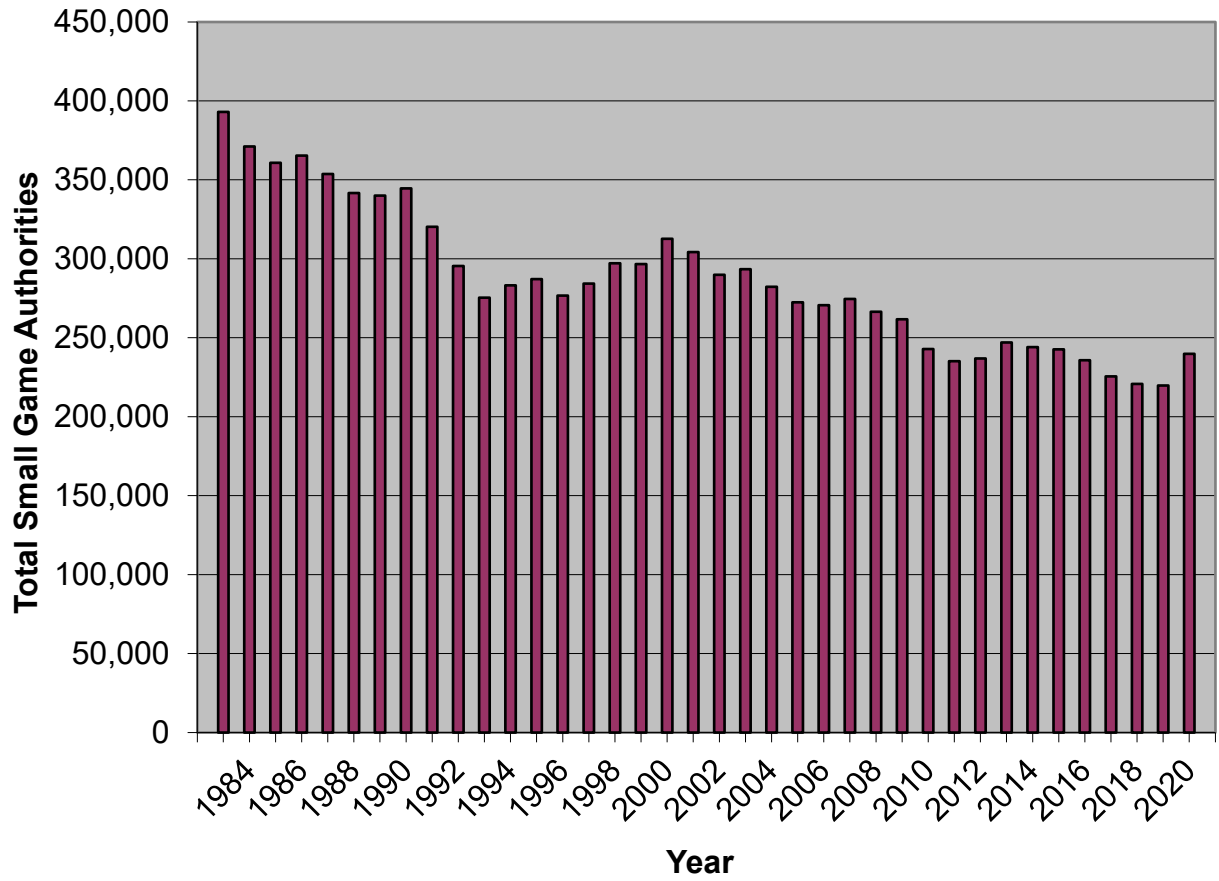


Figure 1. Small Game License sales 1983-2020.

Table 2. The number of small game hunters, percent of total hunters, days hunted, harvest, harvest/day, and top three counties of harvest for all small game species during the 2020-21 season.

Species	Number of Hunters	Percent Hunting	Days Hunted*		Harvest*		Harvest / Day	Top Three Counties
Bobwhite Quail	72	0.0%	452	±887	0	±0	N/A	Grant, Iowa, Lafayette
Cottontail	19,516	8.1%	89,719	±16,986	71,021	±15,923	0.79	Iowa, Vernon, Wood
Coyote	19,828	8.3%	195,422	±58,109	51,193	±21,223	0.26	Waushara, Polk, Columbia
Crow	2,949	1.2%	8,595	±3,578	7,087	±3,551	0.82	Marquette, Oconto, St. Croix
Gray Fox	839	0.4%	9,575	±11,505	452	±887	0.05	Iowa, Bayfield, Burnett
Gray Partridge	144	0.1%	1,357	±1,982	754	±1,478	0.56	Chippewa, Grant, Iowa
Mourning Dove	5,586	2.3%	29,856	±12,073	31,590	±15,672	1.07	Marinette, Kenosha, Manitowoc
Pheasant	42,532	17.7%	362,345	±42,843	272,023	±49,524	0.75	Jefferson, Dane, Waukesha
Raccoon	4,531	1.9%	45,161	±26,359	42,221	±24,846	0.93	Buffalo, Pepin, Forest
Red Fox	2,949	1.2%	21,638	±13,556	1,432	±873	0.07	Oneida, Langlade, Marathon
Ruffed Grouse	61,305	25.6%	564,477	±62,308	217,739	±49,524	0.39	Price, Bayfield, Douglas
Snowshoe Hare	5,130	2.1%	27,142	±13,064	16,587	±15,309	0.61	Douglas, Bayfield, Price
Squirrel	40,327	16.8%	217,588	±25,344	228,671	±30,633	1.05	Grant, Waupaca, La Crosse
Woodcock	12,371	5.2%	96,957	±21,101	57,752	±17,733	0.60	Marinette, Price, Forest
Woodchuck	1,726	0.7%	5,504	±3,105	3,393	±2,174	0.62	Brown, Dodge, Fond du Lac

* Confidence interval is 95%.

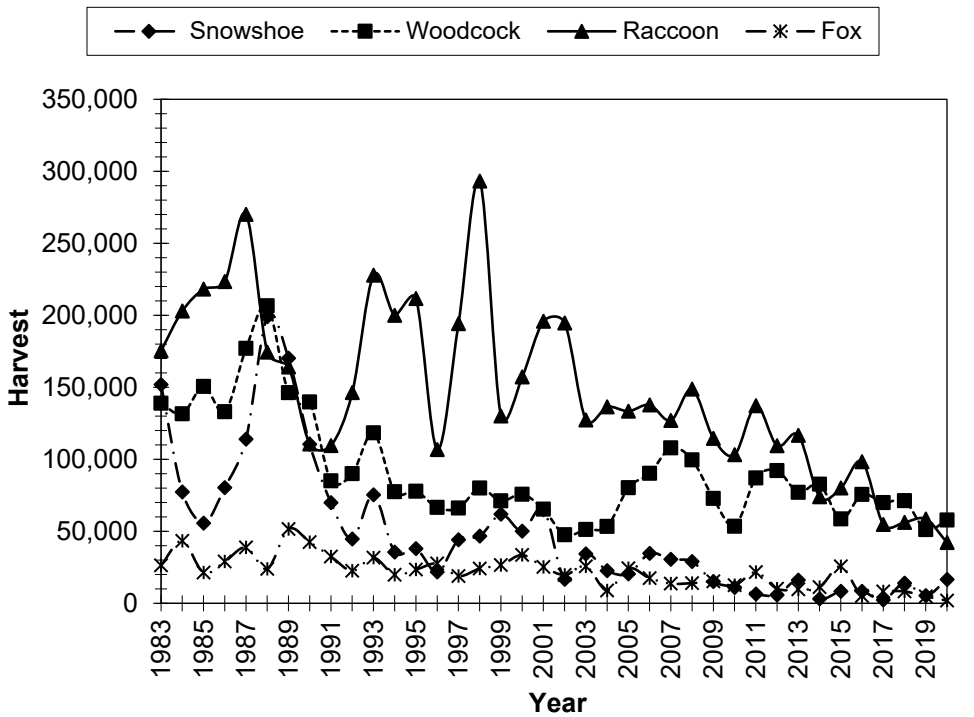
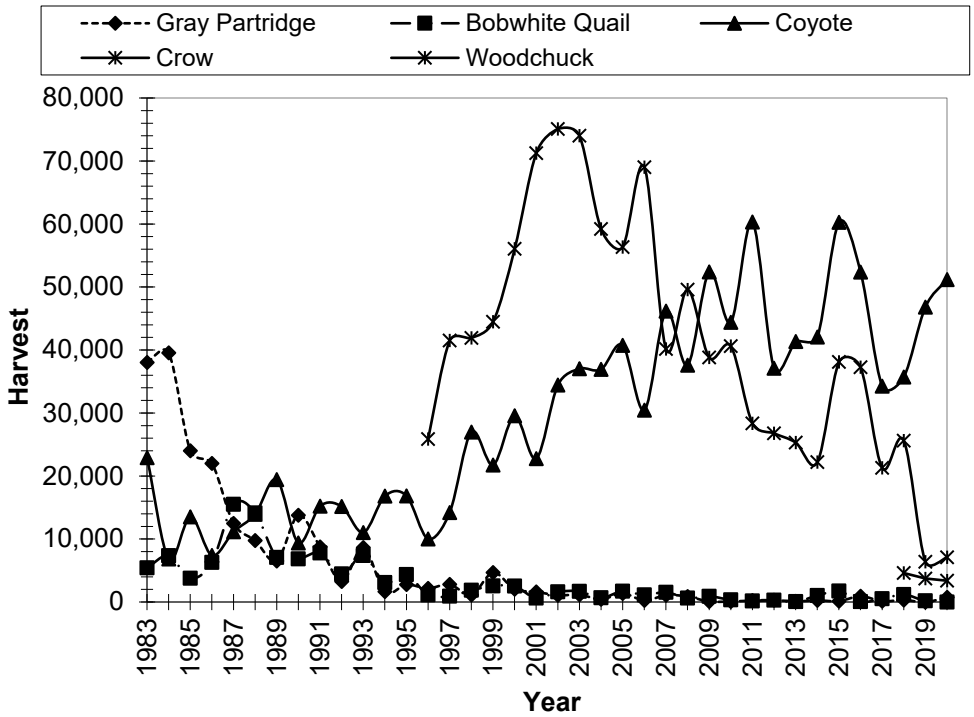


Figure 2. Small game harvest trends for all species 1983-2020.

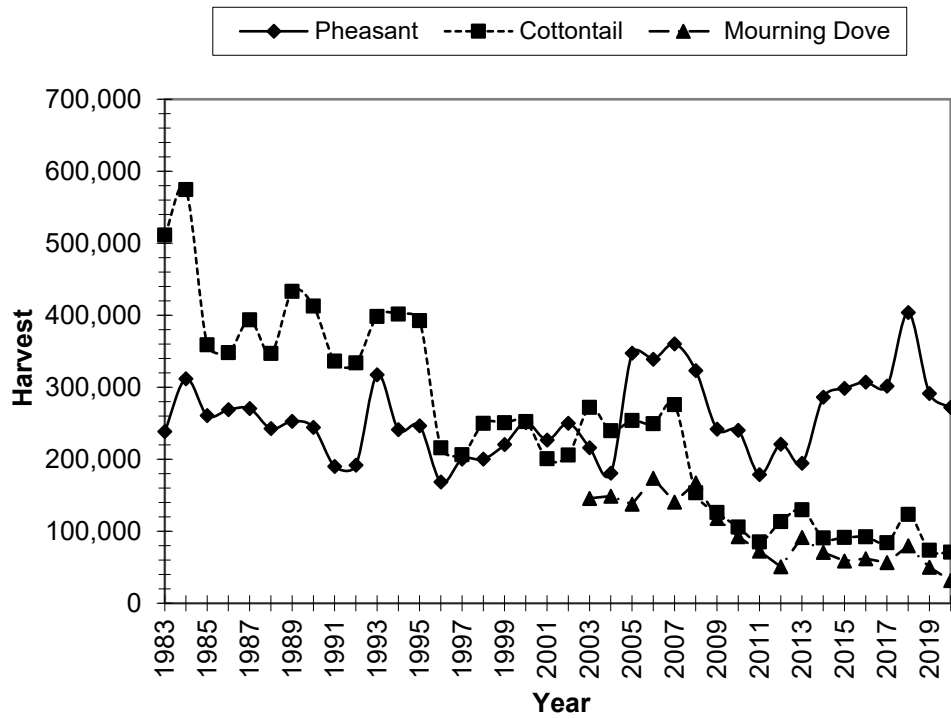
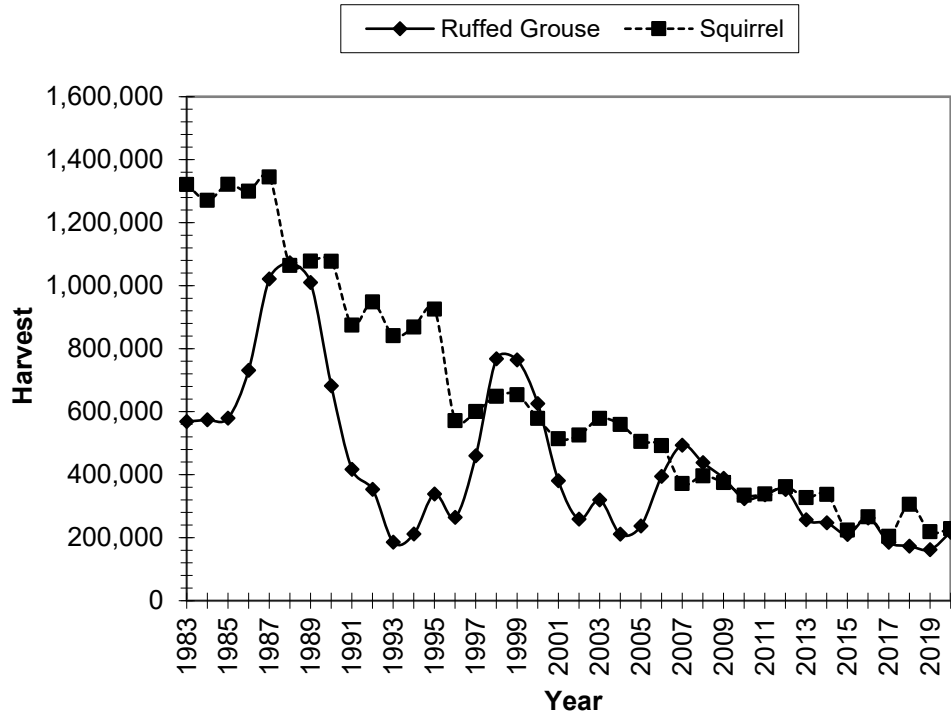


Figure 2. Small game harvest trends for all species 1983-2020 (continued).