

Report to the Sixty-Second Legislature
Upland Game Bird Enhancement Program



Prepared by

The Wildlife Division
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UPLAND GAME BIRD ENHANCEMENT PROGRAM OVERVIEW

LEGISLATIVE HISTORY

The 50th Montana State Legislature enacted SB 331 in 1987 establishing a pheasant enhancement program to be administered by Montana Fish, Wildlife and Parks (FWP). The statute specified that \$2 from each resident game bird license and resident sportsmen's license together with \$23 from each nonresident game bird license and nonresident combination license would be used to reimburse people releasing pheasants through the Upland game Bird Enhancement Program (UGBEP). Once sites were approved by FWP, birds were released into suitable habitat capable of supporting a viable pheasant population and where reasonable free public hunting is provided.

In 1989 the 51st Montana State Legislature enacted SB 33 to amend SB 331 (87-1-247, MCA). This statute added a provision to the original legislation authorizing unexpended funds remaining at the end of the fiscal year for use toward the development, enhancement, and conservation of upland game bird habitat in Montana. Habitat enhancement efforts as addressed in this statute provided assistance to landowners through cost-share programs, leases, and conservation easements to establish:

- Suitable nesting cover
- Winter cover and food plots
- Range management improvements
- Shelterbelt plantings

The 57th Montana State Legislature made several changes to the program in 2001 through passage of SB 304. This statute was enacted as, *“an act clarifying the scope of and revising funding criteria for the upland game bird habitat enhancement program; requiring that a percentage of available revenue be spent on the upland game bird release program; clarifying project eligibility criteria; amending sections 87-1-247, 87-1-248, and 87-1-249, MCA; and providing an effective date.”*

Specific outcomes and recommendations from the 2009 Legislative Program Audit prompted further revisions to the Upland Game Bird Enhancement Program. The

61st Montana State Legislature endorsed HB 499, *“an act revising laws related to the upland game bird enhancement program; establishing a citizens’ advisory council; authorizing development of a strategic program plan; revising reporting requirements; amending sections 87-1-247 and 87-1-250, MCA; and providing an effective date.”*

Highlights of HB 499 are detailed in the Upland Game Bird Enhancement Program Updates section.

EXPENDITURE REQUIREMENTS

Prior to the 61st Montana Legislature, Montana SB 304 identified spending requirements relative to administrative costs and the appropriation of funds required to be spent annually on activities related to upland game bird releases. More specifically, the statute limited spending on program administration to 15% of revenue received during a given fiscal year. The statute also sets aside at least 15% of the funds collected under 87-1-246, MCA, for expenditures related to upland game bird releases (e.g., pheasant releases, wild turkey transplants, and emergency supplemental feeding) and requires 25% of these funds be spent on upland game bird releases (e.g., pheasant releases and wild turkey transplants) each fiscal year (87-1-247 MCA).

Expenditure requirements were revised through Montana HB 499, enacted in 2009. After funds are set aside for activities related to upland game bird releases, the statute requires that the remaining funds be available for upland bird habitat enhancement projects and program administration. Henceforth, the 15% administrative cap was removed from statute (87-1-247, MCA) beginning Fiscal Year 2010.

Other highlights of this statute as it pertains to 87-1-248, MCA, include:

- Projects funded by the Upland Game Bird Enhancement Program cannot exceed \$200,000. Additionally, the Fish, Wildlife and Parks Commission must approve any UGBEP project that exceeds \$100,000.
- Purchases of equipment, land, and buildings are limited to \$25,000.
- Wells, pipelines, and roads may not be funded at more than 50% of their construction costs.

- Any equipment purchased with funds collected under 87-1-246, MCA, remains the property of the department.
- A shelterbelt may not be constructed within 400 feet of any residential building or building occupied by livestock.
- Funds collected under 87-1-246, MCA, may be expended for supplemental feeding programs that are authorized by the department.

MONTANA’S UPLAND GAME BIRDS

Montana is home to nine upland game bird species found in diverse habitats across the state that provide varying degrees of hunting opportunities. Habitat needs for five native upland game bird species and four exotic species are addressed through projects funded by the Upland Game Bird Habitat Enhancement Program (UGBHEP).

Native species:

- Greater sage-grouse
- Sharp-tailed grouse
- Dusky grouse (Blue grouse)
- Spruce grouse (Franklin’s grouse)
- Ruffed grouse

Exotic species:

- Ring-necked pheasants
- Gray partridges (Hungarian partridges)
- Merriam’s turkeys
- Chukars

BIENNIAL REVENUE AND EXPENDITURES

Table 1 illustrates a breakdown of revenue and expenditures of the Upland Game Bird Enhancement Program as well as specific expenditure information related to statutory requirements.

Relative to previous administrative expenditures, FY 2010 administrative costs were consequently higher to account for the three newly hired UGBEP field biologists and the recently created UGBEP Advisory Council. In the previous biennium, administrative costs solely funded the Upland Game Bird Enhancement Program Coordinator’s position and hired contractors, when applicable.

The UGBEP administrative expenditures include all costs attributable to the overall operation and implementation of the program, including personal services and operations costs. Examples of administrative costs include: salaries, benefits, vehicles for the three field biologists, computers, home offices – where applicable, professional development, and program advertizing/publications. The 12-member council expenditures include daily honorariums, mileage and lodging costs, per-diem allowances, meeting room expenses, and administrative support.

Table 1. Upland Game Bird Enhancement Program revenue and spending: Fiscal years 2009 - 2010 (87-1-246 and 87-1-247, MCA).

Fiscal Year 2009	Upland Game Bird Release	Habitat Enhancement	Administration	Program Totals
Revenue	\$107,172	\$500,112	\$107,172	\$714,456
Expenditures	\$161,269	\$241,910	\$100,635	\$503,814
Budget Rules¹	Minimum Expenditure: \$26,793			
Fiscal Year 2010	Upland Game Bird Release	Habitat Enhancement	Administration	Program Totals
Revenue	\$104,900	\$594,403		\$699,303
Expenditures	\$124,410	\$203,478	\$261,645 ³	\$589,533
Budget Rules²	Minimum Expenditure: \$26,225			

¹MCA 87-1-247 (1-3): Per SB 304, not more than 15% of the money generated may be used for administrative purposes. 15% of funds collected must be set aside each fiscal year for expenditures related to upland game bird releases of which, at least 25% must be spent on upland game bird releases each fiscal year.

²MCA 87-1-247 (1-3): Per HB 499, 15% administrative cap was removed.

³Expenditures include \$39,915 administrative costs for the Upland Game Bird Enhancement Program Citizens’ Advisory Council (87-1-251, MCA).

BIENNIAL ACCOMPLISHMENTS

Montana Fish, Wildlife & Parks (FWP) administers the statewide Upland Game Bird Enhancement Program (UGBEP). The UGBEP is organized into two programs:

1. Upland Game Bird Release Program (Montana ARM 12.9.6)
2. Upland Game Bird Habitat Enhancement Program (Montana ARM 12.9.7)

The principle outcomes of the UGBEP are pheasant and turkey releases; establishment or enhancement of upland game bird habitats; conservation of valuable game bird habitats; and enhanced public upland game bird hunting opportunities.

UPLAND GAME BIRD RELEASE PROGRAM

PHEASANT RELEASES

Participants in the pheasant release program may either raise or purchase birds for release. Local FWP biologists assess the potential release site for suitable habitat that provides released pheasants with sufficient woody and winter cover, nearby food sources, and idle cover (Figure 1). If the release site is on private land, the landowner must also agree to allow reasonable free public hunting. Tables 2 and 3 summarize pheasant releases for calendar years 2009 and 2010, respectively.



Figure 1. Pheasant release in Sheridan County.

Table 2. Summary of pheasant releases funded through the Upland Game Bird Enhancement Program for calendar year 2009.

Region	# of Contracts	Pheasants Released	Acreage Open to Hunting	Estimated Hunter-Days
4	15	2,700	13,590	1,220
5	1	200	4,160	150
6	71	10,772	114,802	10,507
7	2	314	1,280	70
Total	89	13,986	133,832	11,947

Table 3. Summary of pheasant releases funded through the Upland Game Bird Enhancement Program for calendar year 2010.

Region	# of Contracts	Pheasants Released	Acreage Open to Hunting	Estimated Hunter-Days
4	6	1,400	26,400	1,322
5	1	150	4,160	150
6	104	10,272	105,827	12,518
7	6	850	8,880	500
Total	117	12,672	145,267	14,490

TURKEY TRANSPLANTS

Merriam’s turkeys are trapped from existing wild populations and transplanted to areas with favorable turkey habitat, normally in cooperation with volunteers from the National Wild Turkey Federation (NWTf) (Figure 2). Each new turkey release project is initiated with a biological evaluation of habitat suitability followed by an environmental assessment of the overall project and approval by the FWP Commission. Also as part of the process, FWP secures agreements from adjacent landowners that may be potentially affected by expanding turkey populations. The consent forms also confirm the landowner’s intent to allow public turkey hunting. Supplemental releases may also occur but require an evaluation that considers the history of previous releases and identifies justifications that warrant supplementing existing populations. Table 4 summarizes turkey transplants that occurred in 2009. No turkey transplants occurred in 2010.



Figure 2. Wild turkey transplant along the Milk River, Valley County.

Table 4. Summary of Merriam’s turkeys transplanted during the calendar year 2009.

County	Location	# of Turkeys
Valley	Olsen Conservation Easement	24
Valley	Mouth of Buggy Creek, 12 miles west of Glasgow	25
Blaine	Cowan Ranch	20
Blaine	Battle Creek	20
Total		89

SUPPLEMENTAL FEEDING

Emergency supplemental pheasant feeding is intended to enhance winter survival and body condition during extreme weather conditions in advance of spring breeding/nesting activities. These emergency activities, such as placing barley bales or setting up enclosed feeders, are not considered habitat enhancements, but instead supplemental feeding. There are potential drawbacks of supplemental feeding including artificially crowding birds, making them more vulnerable to disease, stress, and predation. This practice is focused on Region 6 where wintery conditions tend to be more extreme, more frequent, and more prolonged relative to other pheasant habitats across Montana.

Criteria were met to initiate supplemental feeding during the winters of 2009 and 2010 as defined in ARM 12.9.615 (Table 5).

Table 5. Summary of supplemental feeding activities in 2009 and 2010.

Year	County(s)	# of Feeding Sites	Expenditures
2009	Roosevelt, Sheridan	37	\$8,972
2010	Roosevelt, Sheridan	12	\$989

UPLAND GAME BIRD HABITAT ENHANCEMENT PROGRAM

The UGBHEP funds habitat enhancements and conservation in partnership with landowners, organizations, and other funding sources. A description of each type of habitat project is included in the Habitat Project Descriptions section. During the biennium, the UGBHEP obligated funds for 42 projects (Table 6) comprised of over 16,600 project acres (e.g., food plots, shelterbelts, leased acres). As a result of these 42 projects, approximately 163,200 acres of land is open to reasonable public upland game bird hunting, accommodating an estimated 13,000 hunter-days.

With the exception of five CRP Add-on rental payments, all UGBHEP contracts included shared funding or in-kind contributions from a variety of sources including private landowners, Pheasants Forever chapters, BLM, US Fish and Wildlife Service, USDA programs, and the National Wild Turkey Federation. Overall, UGBHEP funds made up about 56% of project costs, with cooperators and other partners contributing the balance (Table 6).

As of December 2010, the UGBHEP has 256 active contracts comprising over 300,000 project acres with approximately 675,000 total acres available for public upland game bird hunting.

Table 6. Upland Game Bird Enhancement Program projects and agreements initiated during the 2009-2010 biennium.

Project Type	Region	County	Project Effective Date	Estimated Costs*				Project Acres	Acres Open to Hunting
				UGBHEP	Cooperator	Other Partners	Project Total		
ASPEN REGENERATION	5	CARBON	04/23/10	\$ 30,000	\$ 25,000	\$ 5,000	\$ 60,000	50	14,000
BROOD STRIPS	4	TETON	04/29/10	\$ 650	\$ 2,495	\$ -	\$ 3,145	1	12,000
CRP ADD-ON PAYMENT	5	CARBON	10/01/09	\$ 1,564	\$ -	\$ -	\$ 1,564	174	25,300
CRP ADD-ON PAYMENT	6	MCCONE	10/01/09	\$ 1,881	\$ -	\$ -	\$ 1,881	209	210
CRP ADD-ON PAYMENT	7	GARFIELD	10/01/09	\$ 6,748	\$ -	\$ -	\$ 6,748	750	7,151
CRP ADD-ON PAYMENT	6	MCCONE	10/01/09	\$ 1,332	\$ -	\$ -	\$ 1,332	197	320
CRP ADD-ON PAYMENT	6	HILL	10/01/09	\$ 4,039	\$ -	\$ -	\$ 4,039	238	320
DEER-PROOF FENCE	5	YELLOWSTONE	05/01/09	\$ 2,882	\$ -	\$ 2,475	\$ 5,357	5	11,040
DEER-PROOF FENCE	7	CUSTER	05/12/09	\$ 1,755	\$ 585	\$ -	\$ 2,340	5	80
NESTING COVER	4	CASCADE	08/04/08	\$ 132	\$ 44	\$ -	\$ 176	4	1,080
NESTING COVER	7	CUSTER	05/12/09	\$ 3,784	\$ 1,516	\$ -	\$ 5,300	15	80
NESTING COVER	4	PONDERA	05/15/09	\$ 110	\$ -	\$ -	\$ 110	1	1,440
NESTING COVER	4	PONDERA	06/01/09	\$ 267	\$ 100	\$ -	\$ 367	5	1,440
NESTING COVER	6	SHERIDAN	03/11/10	\$ 2,000	\$ 4,735	\$ 5,070	\$ 11,805	101	480
NESTING COVER	4	TETON	04/29/10	\$ 760	\$ 790	\$ -	\$ 1,550	20	12,000
SAGEBRUSH LEASES	7	ROSEBUD	08/20/08	\$ 84,228	\$ -	\$ 84,228	\$ 168,456	14,038	14,038
SAGEBRUSH LEASES	5	PETROLEUM	04/08/10	\$ 3,840	\$ 3,840	\$ -	\$ 7,680	640	640
SHELTERBELTS	4	CASCADE	08/04/08	\$ 9,670	\$ 3,197	\$ -	\$ 12,866	14	1,080
SHELTERBELTS	6	RICHLAND	09/01/08	\$ 14,278	\$ 4,580	\$ 2,450	\$ 21,308	7	3,490
SHELTERBELTS	7	MCCONE	03/03/09	\$ 10,807	\$ 11,900	\$ -	\$ 22,707	13	2,150
SHELTERBELTS	5	YELLOWSTONE	05/01/09	\$ 5,503	\$ -	\$ 1,568	\$ 7,071	5	11,040
SHELTERBELTS	7	CUSTER	05/12/09	\$ 22,382	\$ 518	\$ -	\$ 22,900	5	80
SHELTERBELTS	4	PONDERA	06/01/09	\$ 6,120	\$ 15,240	\$ -	\$ 21,360	3	1,440
SHELTERBELTS	7	FALLON	03/18/10	\$ 7,222	\$ 7,222	\$ -	\$ 14,444	6	679
SHELTERBELTS	4	PONDERA	06/11/10	\$ 6,775	\$ 1,800	\$ -	\$ 8,575	1	1,240
WETLAND CREATION	4	PONDERA	06/11/10	\$ 250	\$ 2,400	\$ -	\$ 2,650	3	1,240

Table continued next page

Project Type	Region	County	Project Effective Date	Estimated Costs*				Project Acres	Acres Open to Hunting
				UGBHEP	Cooperator	Other Partners	Project Total		
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	09/01/08	\$ 383	\$ 84	\$ 296	\$ 763	4	1,170
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	09/01/08	\$ 328	\$ 328	\$ -	\$ 655	10	2,100
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	09/01/08	\$ 556	\$ 126	\$ 444	\$ 1,126	7	680
WINTER FOOD OR COVER PLOTS	7	CARTER	10/02/08	\$ 1,575	\$ 525	\$ -	\$ 2,100	21	4,160
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	10/28/08	\$ 1,542	\$ 514	\$ -	\$ 2,056	10	240
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	09/01/09	\$ 450	\$ 150	\$ -	\$ 600	6	300
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	09/01/09	\$ 2,250	\$ 750	\$ -	\$ 3,000	10	1,241
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	09/01/09	\$ 450	\$ 150	\$ -	\$ 600	6	3,000
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	05/14/10	\$ 1,125	\$ 375	\$ -	\$ 1,500	15	2,390
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	05/14/10	\$ 750	\$ 250	\$ -	\$ 1,000	10	480
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	06/11/10	\$ 842	\$ 105	\$ 825	\$ 1,772	5	1,733
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	06/11/10	\$ 300	\$ 100	\$ -	\$ 400	4	3,000
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	06/14/10	\$ 581	\$ 194	\$ -	\$ 775	5	148
WINTER FOOD OR COVER PLOTS	6	DANIELS	06/21/10	\$ 765	\$ 255	\$ -	\$ 1,020	5	10,000
WINTER FOOD OR COVER PLOTS	6	SHERIDAN	06/30/10	\$ 1,230	\$ 410	\$ -	\$ 1,640	5	1,500
WINTER FOOD OR COVER PLOTS	6	ROOSEVELT	06/30/10	\$ 225	\$ 75	\$ -	\$ 300	3	7,000
TOTAL				\$ 242,330	\$ 90,352	\$ 102,356	\$ 435,037	16,634	163,200

* Estimated costs based on information in the contract between FWP and the project cooperator.

HABITAT PROJECT DESCRIPTIONS

Habitat requirements for each upland game bird species vary seasonally and across different life stages. The UGBHEP funds habitat conservation and habitat enhancement projects geared toward the specific habitat requirements of the respective game bird species. When FWP field biologists review a potential habitat project, they consider the year round habitat needs and focus enhancements on habitat components that appear to be lacking. Often referred to as “habitat bottlenecks,” these limited habitat resources can greatly reduce productivity or survival. The following section provides an overview of each project type and the objectives they intend to fulfill.

For more detailed information on habitat requirements of species and habitat enhancement projects, see *the Literature Review of Montana Upland Game Bird Biology and Habitat Relationships as Related to Montana FWP’s Upland Game Bird Habitat Enhancement Program* (Moynahan and Walker 2004), at:

<http://fwpiis.mt.gov/content/getItem.aspx?id=36175>

Aspen Regeneration Projects

Ruffed grouse in Montana are closely tied to productive aspen habitats. The quality of ruffed grouse habitat deteriorates when conifer encroaches in aspen communities or where stands become old and unproductive. Aspen regeneration projects involve small-patch clear-cutting and selective conifer removal to stimulate aspen root-suckering, thereby improving or expanding ruffed grouse habitat (Figure 3).



Figure 3. Effects from an aspen regeneration project conducted in 1991, Carbon County.

Brood Strips

Insects are a critical food item for newly hatched pheasant chicks. Montana's arid summers cause soils and vegetation to dry out early in the growing season, which reduces insect availability that is critical to chick health and survival. Brood strips are typically established by tilling plots in the spring, exposing bare soil, and irrigating plots through the summer to maintain moist soils, resulting in a flush of green annual vegetation and a diversity of insects (Figures 4 and 5). UGBHEP funds are typically used to share the cost of tillage and irrigation practices.



Photo courtesy of Headwaters Chapter #563, Pheasants Forever, Helena, MT.

Figure 4. The Pheasants Forever Headwaters Chapter partnered with the UGBHEP to establish brood strips on Freezout WMA (2010).



Figure 5. The newly established brood strip yields productive food and security habitat for pheasant broods (2010).

Conservation Easements

Productive upland game bird habitats that also provide substantial bird hunting opportunities are the focus of conservation easements funded in part with UGBHEP dollars. Under a conservation easement, landowners agree to protect their land in perpetuity against certain land uses that are incompatible with key habitat values, while retaining the right for other compatible land uses. These projects assure public access and conservation and enhancement of productive habitats while maintaining traditional uses of the land in perpetuity.

CRP Add-on Rental Payments

Initiated in 2010, these projects provide rental payments to qualified private landowners or operators who have been awarded a Conservation Reserve Program (CRP) contract with the Farm Service Agency (FSA). Contracts include specific habitat management and public access requirements. UGBHEP funds are used for the rental payment and can share the costs of certain cover enhancement practices if needed.

Food Plots

Exotic upland game bird species - pheasants, gray partridge, and wild turkeys - generally require a source of cereal grains for winter survival. Harvested grain fields adjacent to winter cover commonly provide this source of food. In some

areas, food plots (unharvested grain) can provide important food and cover (Figure 6), particularly where grain fields do not occur. Plots are generally 1 to 10 acres in size, and livestock use is prohibited during fall and winter.



Figure 6. A newly established food plot planted next to winter cover provides important food and cover for upland game birds (Sheridan County).

Grazing Systems

Upland game birds are directly affected by the amount of herbaceous and woody cover available to them for hiding, feeding, and shelter. Livestock grazing may directly affect these habitat features. Three-treatment rest rotation grazing benefits upland game birds by providing habitat blocks of undisturbed grass and forb cover (Figures 7 and 8). The department designs the systems to also meet the needs of vegetation for reproduction, expanding roots, and maintaining reserves for survival and vigorous growth during the growing season. This grazing strategy results in a healthy functioning and sustainable habitat well suited for upland game birds. Furthermore, ranchers also benefit from this sustainable grazing system.

Specifically, pastures are managed to receive one of three grazing treatments each year (Table 7). This results in approximately two-thirds of the range having undisturbed grass and forb cover during the nesting and brood rearing periods, which is important for hiding security, insect production, and ultimately nest and brood survival. One-third of the range remains ungrazed through the winter, enhancing hiding cover during hunting season and through the winter. These systems can affect relatively large areas of 10,000 acres or more and primarily benefit prairie grouse (e.g., greater sage-grouse, sharp-tailed grouse) and gray partridge

among many other upland nesting birds and other wildlife. Project agreements are a minimum of 15 years.



Figure 7. A rest-rotation grazing project in Richland County.



Figure 8. Rest pasture in a rest-rotation grazing system, Richland County.

Table 7. Standard three treatment rest rotation grazing for livestock.

Livestock Grazing Formula (minimum of 3 pastures)			
Grazing Seasons	Pasture 1	Pasture 2	Pasture 3
Year 1	A	B	C
Year 2	B	C	A
Year 3	C	A	B
Treatments	A= livestock grazing allowed during the growing season		
	B = livestock grazing begins after seed-ripe time.		
C = rest from livestock grazing yearlong.			
<i>When all treatments have been applied to all pastures, the grazing rotation begins again.</i>			

Montana Sagebrush Initiative

Similar to aspen and ruffed grouse, sage-grouse require sagebrush habitats for food and cover. In 2005, FWP identified the highest priority privately owned sage-grouse habitats for conservation based on survey information and land-use/land ownership patterns. The Montana Sagebrush Initiative utilizes UGBHEP funds in combination with federal funds to pay landowners a 1-time rental payment of \$12/acre for a 30-year agreement on high priority habitats (Figure 9). Through the agreement, the landowner commits not to treat sagebrush habitats with herbicides nor burn or plow enrolled habitats.



Figure 9. Sagebrush lease, Garfield County.

Nesting Cover

Nesting and brood cover is commonly a limiting habitat feature for pheasants and other upland nesting birds. The Conservation Reserve Program has resulted in substantial undisturbed cover on the landscape, with obvious benefits for pheasants, sharp-tailed grouse, and gray partridge. The Supplemental Information section at the end of this report reveals the positive result of CRP on pheasant harvest in Montana (Figure 19). The department has used UGBHEP funds to establish nesting and brood cover and to enhance cover with tillage or inter-seeding grass and forbs, making it more productive for upland game birds (Figure 10).



Figure 10. Partnerships with Pheasants Forever lead to important establishment of dense nesting cover (Sheridan County).

Shelterbelts

Shelterbelts are established to provide winter hiding/thermal cover and, in some cases, winter food for pheasants, gray partridge, and sharp-tailed grouse (Figure 11). The minimum row length is 200 feet, and the shelterbelt must have a minimum of 5 rows. Fences are sometimes added to protect them from livestock and/or deer. Drought conditions have resulted in high rates of mortality or very slow growth for many of the past shelterbelt projects. Fabric weed barriers, cultivation, and drip irrigation systems have been used to increase plant survival and growth rates. Past experience has taught which species and management practices are most likely to result in good survival and provide effective cover after 5-10 growing seasons.

Project agreements are for 15 years, and landowner commitment and care are critical for project success.



Figure 11. Early establishment of a shelterbelt, Fergus County.

Wetland Enhancements or Restorations

Wetland habitats can provide effective brood habitat and winter cover for pheasants and other upland game birds. These projects typically involve constructing or repairing shallow dams or filling drainage ditches to establish or restore wetland functions (Figure 12). UGBHEP funds are used to share the cost of labor and materials associated with these projects.



Figure 12. A landowner and an FWP biologist work together to plan a wetland enhancement project (Pondera County).

UPLAND GAME BIRD ENHANCEMENT PROGRAM UPDATES

The Upland Game Bird Enhancement Program has changed considerably since its inception in 1987. This section details programmatic changes during the past biennium and projects that are new to the UGBHEP.

2009 LEGISLATIVE AUDIT

In 2008 and 2009, the UGBEP underwent a legislative performance audit that reviewed information about the UGBEP's current program funding structure, strategic planning practices, and the use of management information in decision-making. The report concluded with 4 recommendations aimed at strengthening the program strategic planning process and use of program funds. The audit recommended that the department:

1. Revisit the 15% funding allocations that can be used for designated administrative duties found in section 87-1-247(1) MCA.
2. Develop an Upland Game Bird Enhancement Program management plan that guides the long-term vision of the program, which is driven by specific goals, quantifiable objectives, and results-oriented performance measures.
3. Create an Upland Game Bird Enhancement Program advisory council to assist in management planning and to provide a review mechanism for assessing whether program goals and objectives are accomplished.
4. Take steps to correct existing database information to assure data is complete and accurate. Further, controls should be established to assure database information is complete and accurate and accessible on the regional level.

Updates for each of these recommendations are found in this section.

HOUSE BILL 499

Recommendations from the audit that specifically address funding allocations, development of an UGBEP Strategic Plan, and creation of an advisory council were

formally enacted during the 61st Legislature through a bill sponsored by Representative Julie French (87-1-251, MCA).

HB 499 was enacted to:

- Revise laws related to the Upland Game Bird Enhancement Program
- Establish a citizens' advisory council
- Authorize development of a strategic program plan
- Revise reporting requirements

UPLAND GAME BIRD ENHANCEMENT PROGRAM CITIZENS' ADVISORY COUNCIL

The department created and implemented a process for soliciting and selecting citizens to serve on the UGBEP advisory council to advise FWP on the UGBEP strategic plan. As a standing council, it would also serve to monitor program activities in relation to program goal, objectives, administrative rules, statutes, and finances. Appointed by the director, the 12-member council assembled in Helena on July 7, 2009, for the first meeting. Chaired by Representative Julie French, members of the council represent each of the department's seven administrative regions. Membership also includes upland game bird hunters, a chamber of commerce representative, conservationists, an upland game bird biologist, landowners (one of whom is enrolled in Block Management), and a senator and representative from different political parties. At the Council's request, a representative from the Natural Resources Conservation Service and the Department of Natural Resources and Conservation serve in a technical support capacity.

To date, the Council has met 8 times. Meeting venues include Helena, Lewistown, Plentywood, Conrad, and Billings. Meetings generally include a tour of habitat projects; discussions with regional staff; opportunities to allow for and hear public comment; and continued discussions of the UGBEP strategic plan development (Figure 13). In Plentywood, the Council visited a pheasant-rearing facility and were engaged with current pheasant release protocols. Meeting dates and times are announced through departmental news releases and updated on the department's web site. Relevant meeting information (minutes, agendas, and the draft strategic plan outline) are found on the Council web page:

Once the strategic plan is finalized, the Council plans to meet twice a year to evaluate UGBEP activities as outlined in the strategic plan. The average cost per council meeting is approximately \$6,000. Council expenditures for FY 2010 were \$39,915.



Figure 13. Council members visit an UGBHEP project site in Conrad.

UPLAND GAME BIRD ENHANCEMENT PROGRAM STRATEGIC PLAN

Currently in the final stages of development, the UGBEP Citizens' Advisory Council and FWP have completed a final draft document that will undergo a final review at the next Council meeting in January 2011. Once endorsed, the recommendations for the strategic plan will be submitted to the director, and the final version will go through the FWP Commission process for public comment.

The strategic plan document identifies statewide program priorities and incorporates seven regional strategies. Upland game bird habitat and species distributions vary within the state. Therefore, each regional plan contains key background information relative to the region and describes unique opportunities for program implementation.

The essence of this strategic plan provides a common vision of the program's goal and values and a common understanding for how the program will be administered and implemented. The plan describes objectives and strategies to meet those objectives and the overall program goal, as well as identifies specific focus areas for allocating program resources. Finally, the plan identifies necessary rule changes that will help the program operate more effectively and provides performance measures for assessing program success.

The plan is intended to provide sufficient detail to guide and direct actions in a manner that is organized and well understood by many different audiences interested in the program's success. The plan however is strategic and provides sufficient flexibility to address opportunities that are likely to come about over its lifespan. While the plan describes real objectives and strategies for implementation of the UGBEP, it is not intended to serve as an upland game bird species/population management plan. The focus of the UGBEP is habitat and population enhancement. A second document that is not a part of this strategic plan is the UGBEP Field Manual, which serves as a daily reference for establishing UGBEP projects.

UPLAND GAME BIRD HABITAT BIOLOGIST POSITIONS

During the 61st Montana Legislature, HB 499 proposed to amend Section 87-1-247, MCA, by removing that portion of the law that states, *"Not more than 15% of the money generated under 87-1-246 may be used by the department..."* for program administration. HB 499 passed into law effective July 01, 2009, and included three FTE for implementing the UGBEP. The department responded by identifying three core areas where implementation of the UGBEP would benefit from additional staff: Plentywood, Conrad, and Miles City.

The overarching responsibility of these positions is to work with landowners, FWP staff, as well as partner agencies and conservation organizations in locating, negotiating, designing, developing and coordinating upland habitat conservation, enhancement and restoration projects primarily on private land. In addition, these positions will assume the lead role in the pen-reared pheasant stocking program;

supplemental feeding of upland game birds during those winters that meet the regional severity criteria; and monitoring of upland game bird habitat projects.

These FTE have shown tangible benefits to the UGBEP. Collectively, 25 quality habitat projects have been approved as of December 2010, exceeding the number of habitat projects contracted in 2009 (N=12). Additionally, the new biologists play an integral role with the UGBEP Advisory Council and the UGBEP Coordinator by exchanging ideas and recommendations to facilitate program implementation.

As a result of implementing this recommendation, the department expends an additional \$250,000 annually (approximate) for the three Upland Game Bird Habitat Biologists and the UGBEP Coordinator. The department maintains that these new positions will ensure effective and consistent delivery of the UGBEP.

MEMORANDA OF UNDERSTANDING

Staff limitations and increased workloads have limited implementation of projects. Montana FWP has come to realize that maximizing effectiveness to enhance extensive habitats for pheasants requires dedicated farming efforts. The three Memoranda of Understanding (MOU) serve similar purposes of expanding effective habitat treatments known to benefit pheasants and wild turkeys - where they occur.

Partnerships identified through three Memoranda of Understanding initiated in June 2008 continued upland game bird habitat enhancement efforts this biennium (not identified in Table 6). Accomplishments are described below for each of the MOU. These types of agreements have been part of the Council's discussion and will be addressed in the strategic plan.

1. MOU – Habitat Forever/FWP-Billings:

The purpose of this MOU is to restore and enhance wildlife habitat for pheasants and other game birds, primarily on public lands along the Yellowstone River and its major tributaries in Yellowstone, Treasure, Stillwater, Carbon, Bighorn, and Sweetgrass counties in Montana. Specifically, this MOU creates and supports a

Habitat Specialist position to provide farming activities that notably increases capacity for on the ground habitat enhancement projects.

Additional outcomes from this MOU contribute to enhanced cooperative relationships between FWP, Habitat Forever (HF), Bureau of Land Management (BLM), Pheasants Forever (PF), and other cooperating state and federal agencies; improved public exposure of, participation in, and support for the UGBHEP; and expending additional effort toward game bird habitat enhancements that results in improved game bird numbers available to the public.

Working in conjunction with FWP, the Bureau of Land Management (BLM), Habitat Forever (HF), and Pheasants Forever (PF), the Habitat Specialist focused habitat enhancement efforts on Pompeys Pillar National Monument (managed by BLM), Sundance SRMA (managed by BLM), Yellowstone WMA (managed by FWP), and Clark's Fork Fishing Access Site (managed by FWP). Habitat enhancement projects included:

- Winter cover
- Nesting cover (irrigated and dryland)
- Food plots (irrigated and dryland)
- Brood strips
- Wetland development

In addition to habitat work, the Habitat Specialist is certified for herbicide application and also performs equipment maintenance and repair. At any given time, the Habitat Specialist also promotes positive public relations within the community by presenting information and updates at Pheasant Forever banquets and visiting with hunters (Fig. 14). The public outreach conducted by the Habitat Specialist provides hunters and other interested parties with up to date information on the collaborative efforts to improve habitat for upland game birds and efforts to enhance upland game bird hunting opportunities.

Summary:

- In 2009, a total of 377 project acres were developed or enhanced on public lands that offered a combined total of over 4,200 acres of public access. The UGBHEP contributed \$51,994 towards these projects.
- In 2010, a total of 317 project acres were developed or enhanced on public lands that offered a combined total of 4,380 acres of public access. The UGBHEP contributed \$50,601 towards these projects.



Figure 14. The Billings-based Habitat Specialist (far right) visits with upland game bird hunters at Yellowstone WMA.

2. MOU – Habitat Forever/FWP-Lewistown:

The purpose of this MOU is to restore and enhance wildlife habitat primarily for pheasants and other game birds on public and private lands within Fergus, Petroleum, Judith Basin, and Chouteau counties in Montana. Specifically, this MOU creates and supports a Habitat Specialist position to provide farming activities that notably increases capacity for on the ground habitat enhancement projects.

Additional outcomes from this MOU contribute to enhanced cooperative relationships between FWP, Habitat Forever (HF), Pheasants Forever (PF), and other cooperating state and federal agencies; improved public exposure of, participation in, and support for the UGBHEP; and expending additional effort toward game bird habitat enhancements that results in improved game bird numbers available to the public.

Working closely with FWP biologists and the Central Montana Chapter of Pheasants Forever, the Lewistown-based Habitat Specialist performs similar duties as the Billings-based Habitat Specialist. During this biennium, upland game bird habitat enhancements occurred on Wolf Creek (managed by PF), the Beckman WMA (managed by FWP), and Coffee Creek (a newly acquired 800-acre conservation easement in FY 2011). Projects included food plot establishments, nesting cover enhancements, native species restoration (silver sagebrush), improvements to existing grazing systems, and shelterbelt developments/augmentations (Figure 15). In addition to habitat work, the Habitat Specialist has been instrumental to this partnership by serving as the “local ambassador,” providing information to the public about ongoing efforts to maximize upland game bird habitat while improving the quality of public upland game bird hunting.

Summary:

- In 2009, a total of 7,029 project acres were developed or enhanced on lands that offered a combined total of over 9,000 acres of public access. The UGBHEP contributed \$23,924 towards these projects.
- In 2010, a total of 7,032 project acres were developed or enhanced on public lands that offered a combined total of 9,000 acres of public access. The UGBHEP contributed \$44,991 towards these projects.



Figure 15. The Lewistown-based Habitat Specialist cultivates a site in preparation for a future wildlife shelterbelt.

3. Sheridan County MOU:

The purpose of this MOU is to restore and enhance wildlife habitat primarily for pheasants and other game birds on public and private lands within Sheridan County, Montana. Specifically, this MOU develops and supports a farming position to provide tillage, planting, and other farming operations where public upland game bird hunting opportunities exist. Similar to the MOU with Habitat Forever and partners, the Sheridan County MOU increases on the ground capacity to improve habitat for upland game birds while promoting public exposure of, participation in, and support for the UGBHEP. The department anticipates that the Sheridan County MOU will be a cost-effective way of expanding UGBHEP accomplishments (particularly for pheasants) in Sheridan County and in other communities. The local Chamber of Commerce has also committed to help promote the terms of this MOU to private landowners to expand the capacity and quality of pheasant hunting, realizing the economic benefits of upland bird hunting to local businesses.

Summary:

- In FY 2009, a total of 11 acres of food plots were developed or enhanced on lands that offered a combined total of 1,850 acres of public access. The UGBHEP contributed \$1,455 towards these efforts.
- In FY 2010, a total of 5 acres of food plots were developed that offered over 1,700 acres of public access. The UGBHEP contributed \$252 towards these efforts.

UPLAND GAME BIRD ENHANCEMENT PROGRAM PROJECTS ACCESS GUIDE

Montana FWP publishes an annual hunting access guide with maps depicting UGBHEP project locations and pheasant release sites. In 2010, FWP received approximately 120 web requests for the Access Guide and distributed an additional 5,500 guides through FWP offices around the state. For the 2010 hunting season, the UGBEP Access Guide located on the web site received over 2,600 unique “hits” since September 1, 2010. The UGBEP Projects Access Guide provides a description of the habitat projects, preferred method of landowner contact, and number of huntable

acres. A comment card is also included with the guide for hunters to communicate user information to FWP.

MONITORING CONTRACTS

Historically, field personnel conducted most monitoring of UGBHEP projects. To improve consistency and centralize monitoring results, FWP hired three contractors to annually conduct project monitoring. During 2009 and 2010, the contractors and UGB Habitat Biologists visited a total of 70 active project sites to evaluate the status and productivity of shelterbelts, food and cover plots, dense nesting cover, and grazing management projects. Their monitoring reports summarized the assessments on standardized forms and included photographs of project components. In addition to project assessment, the contractors ensured each UGBHEP project had program signs with correct landowner contact information. Where needed, the contractors posted new signs and updated landowner contact information.

The monitoring reports will facilitate improvements to program implementation by alerting FWP of compliance issues and providing information on program effectiveness, which FWP will incorporate into future program changes.

UPLAND GAME BIRD ENHANCEMENT PROGRAM PROJECTED EXPENDITURES

Over a series of years, the UGBHEP account built up carryover funds. This was during a period when the program lacked a coordinator whose sole task was to promote and facilitate project implementation. As well, the department has expanded its services and encumbered additional responsibilities since the UGBEP originated, making it more challenging for field staff to actively promote and complete projects. The department has worked to address this situation in a variety of different ways, and progress is starting to show:

- Hiring 3 new Upland Game Bird Biologists will increase efforts to implement the UGBEP in priority areas identified in the UGBEP Strategic Plan. High quality projects outside the priority areas will also be considered.

- The department is using UGBEP funds in combination with other funding sources to help purchase conservation easements on high quality upland game bird habitats.
- The department is assessing enhancement opportunities at a number of state-managed Wildlife Management Areas. There is considerable opportunity for expanding high quality pheasant and turkey habitat on some of these areas with support from UGBEP. These include Ninepipes (Mission Valley); Rookery (Havre); Canyon Ferry (Townsend); Isaac Homestead (Hysham); Yellowstone (Worden), and Freezout (Choteau) Wildlife Management Areas.
- The department anticipates purchasing additional sagebrush grassland leases in high priority sage-grouse habitats as/if federal cost-share funds become available.
- Opportunities may exist to leverage UGBHEP dollars with an Open Fields grant in order to promote conservation of CRP lands while expanding public access.
- The department is investigating different ways to further integrate the UGBEP with the Hunting Access Enhancement Program. Midwestern states have implemented public pheasant hunting programs on private lands that are unique to Montana's Block Management Program. These programs typically involve a one-time payment to private landowners for a multiple year agreement to manage CRP for pheasants while allowing public walk-in hunting. The 2008 Farm Bill also provides limited funding as an incentive for landowners to allow public hunting on lands enrolled in CRP – another possible funding source for developing a new public pheasant hunting strategy.
- The department is working to expand UGBHEP accomplishments through local conservation groups such as Pheasants Forever.
- Opportunities to expand the UGBEP will occur through partnerships formed with current conservation programs outlined in the 2008 Farm Bill. The USDA-NRCS national office frequently develops and offers new conservation

initiatives that help foster partnerships between agencies and private landowners by offering cost-share incentives for conservation practices that can directly benefit wildlife and their habitats. Through these programs, UGBEP funds can be leveraged with Farm Bill dollars to enhance upland game bird habitat.

SUPPLEMENTAL INFORMATION

MONTANA UPLAND GAME BIRD HUNTERS

Based on annual telephone surveys, the department has estimated the number of resident and nonresident upland game bird hunters (Figure 16). During the past 20 years, the overall trend for both resident and non-resident hunters has been relatively stable.

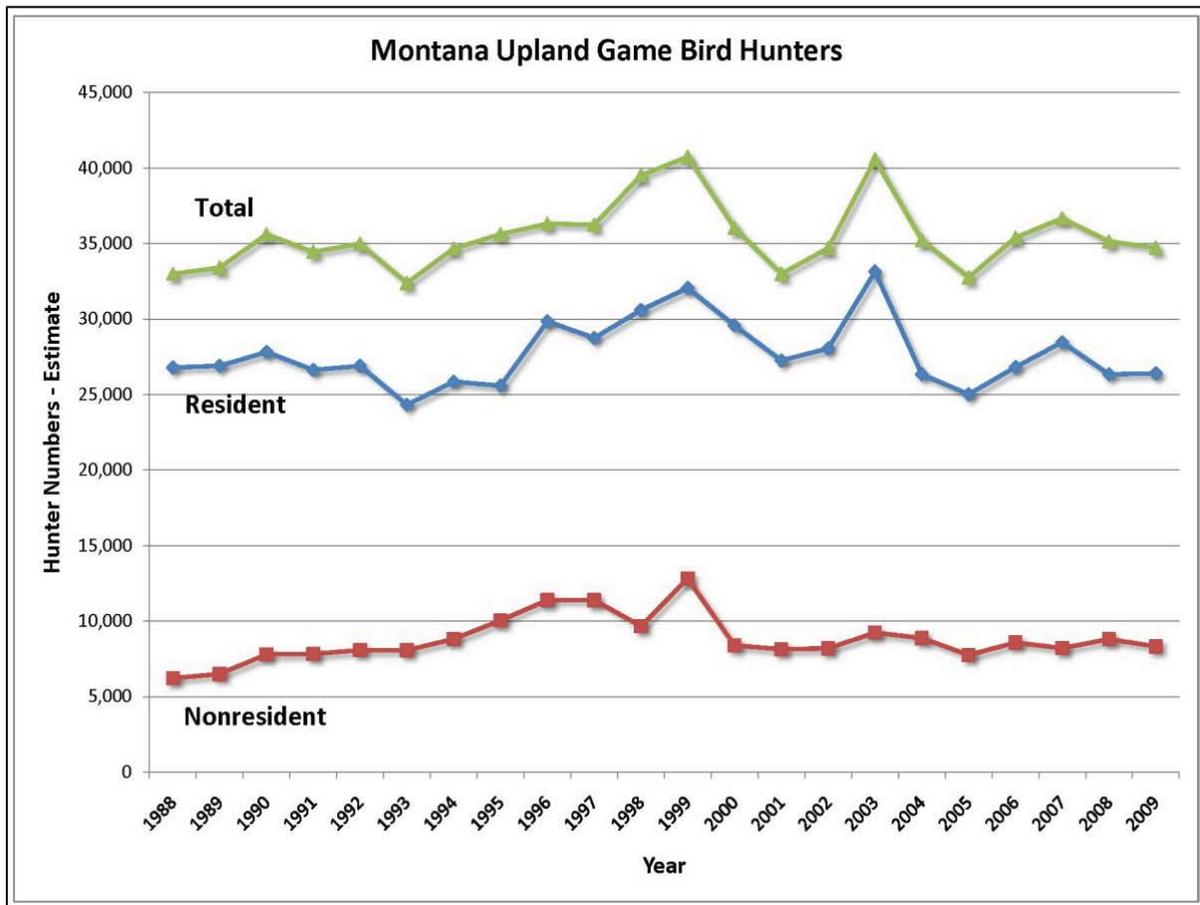


Figure 16. Trend of upland game bird hunters in Montana since 1988.

UPLAND GAME BIRD HARVEST DATA

Montana FWP has collected data on the number of upland game birds harvested each year since the early 1960s (Figures 17 to 23). Of particular interest is the increase in pheasant harvest since 1987, the year CRP was initiated (Figure 19).

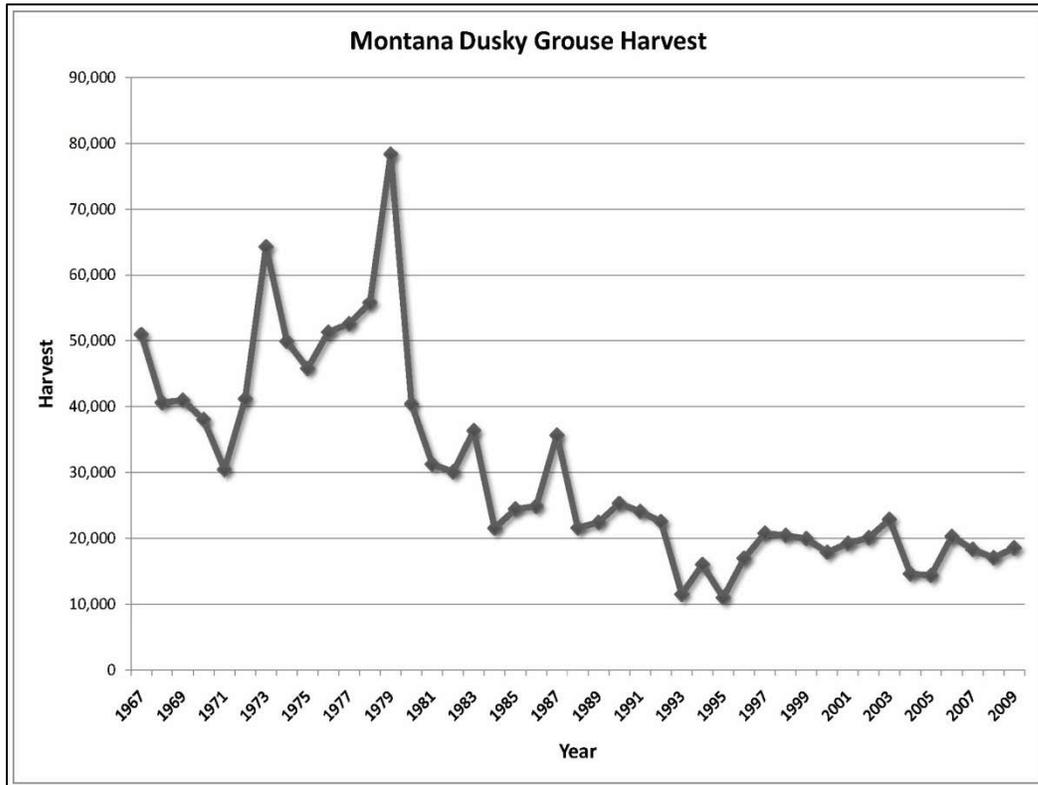


Figure 17. Dusky grouse harvest estimates in Montana since 1967.

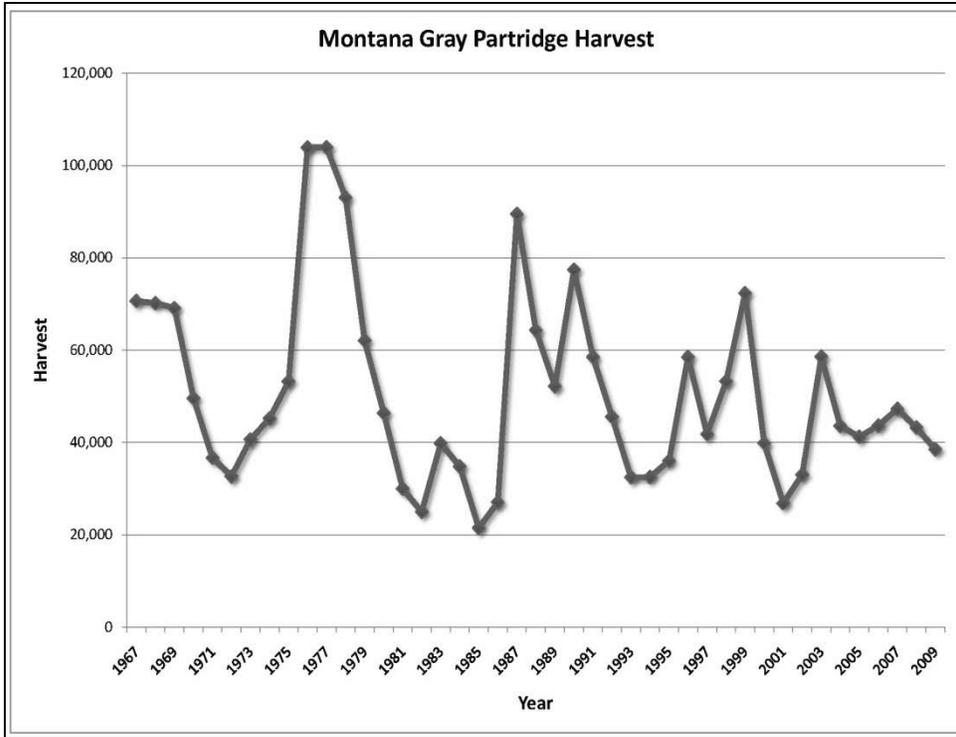


Figure 18. Gray partridge harvest estimates in Montana since 1967.

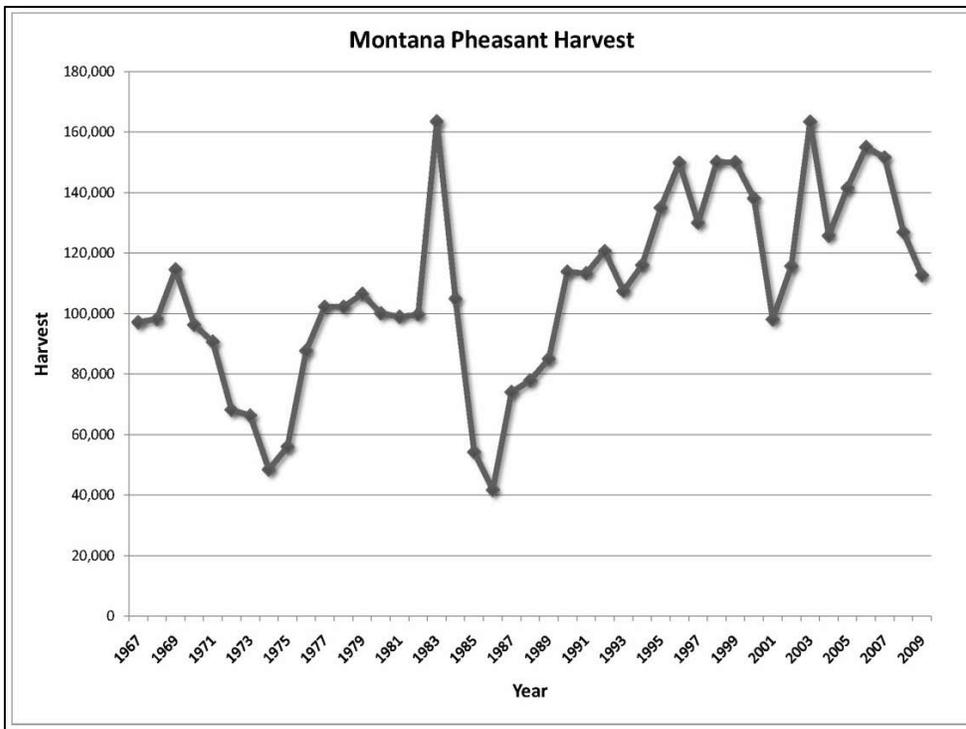


Figure 19. Ring-necked pheasant harvest estimates in Montana since 1967.

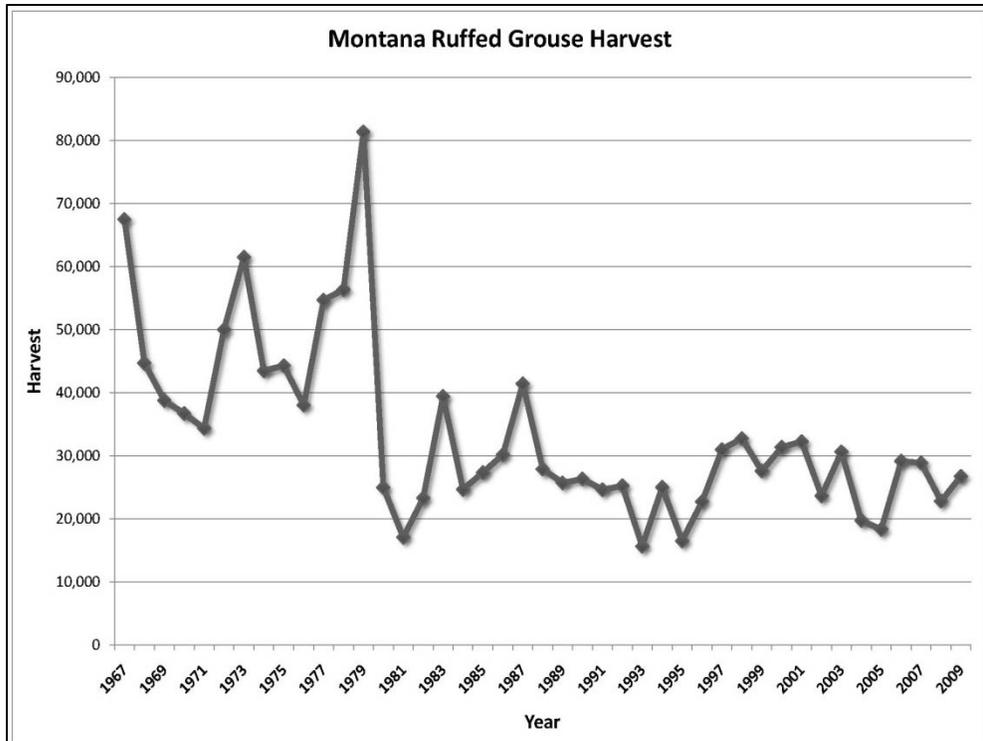


Figure 20. Ruffed grouse harvest estimates in Montana since 1967.

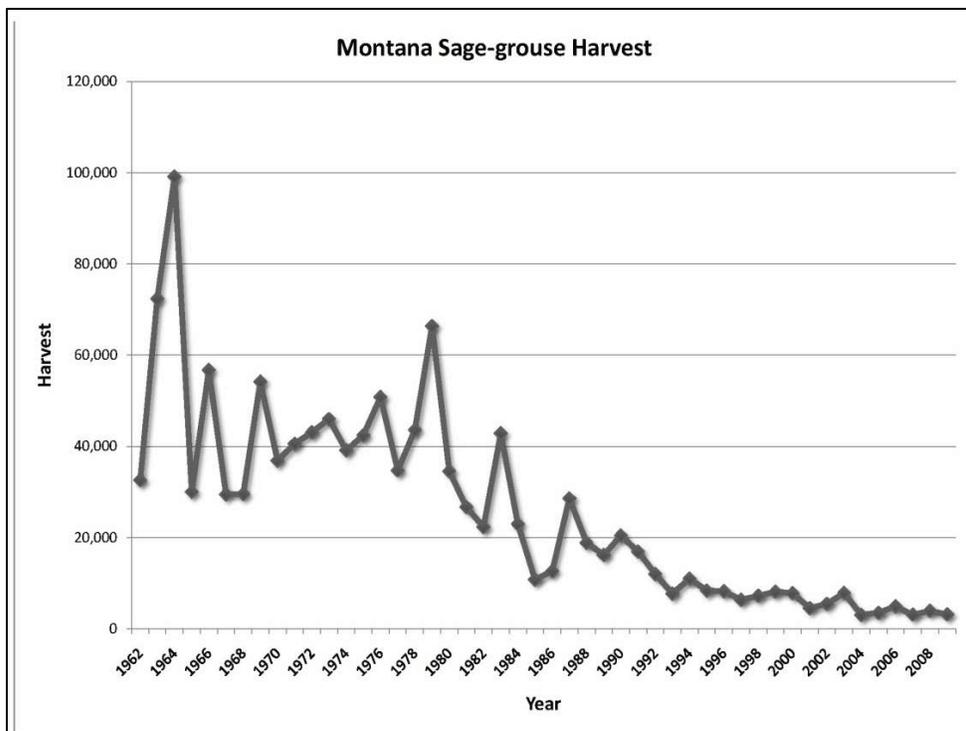


Figure 21. Sage-grouse harvest estimates in Montana since 1962.

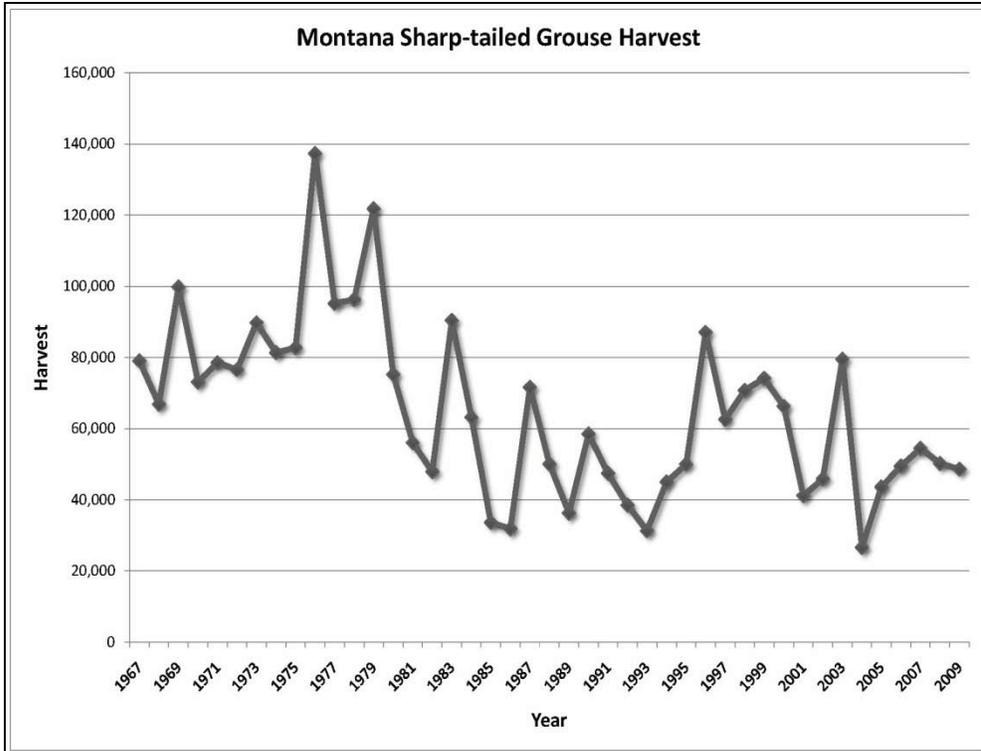


Figure 22. Sharp-tailed grouse harvest estimates in Montana since 1967.

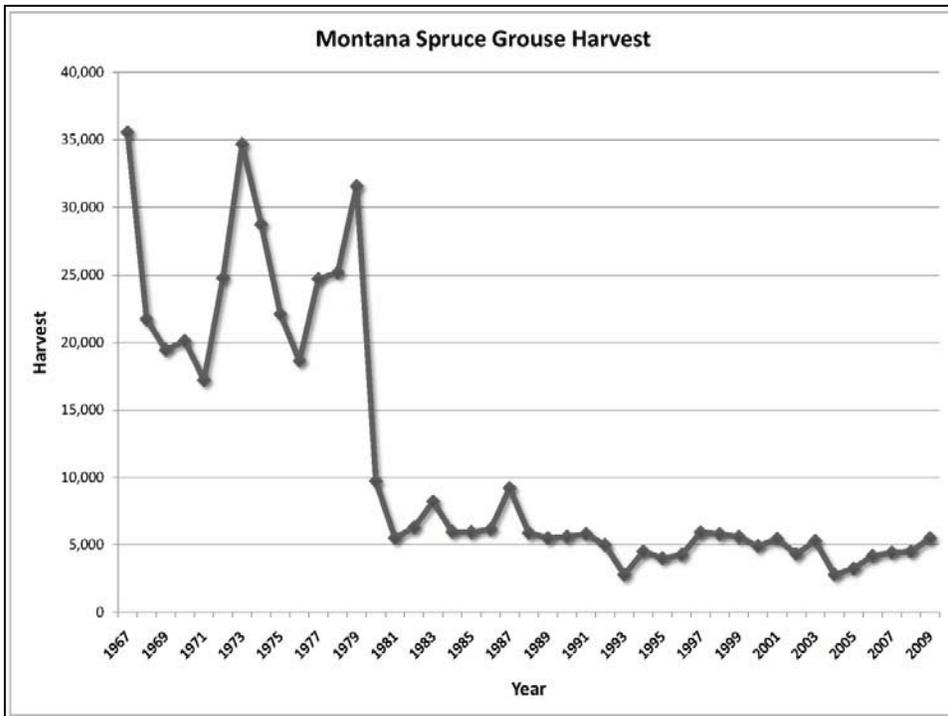


Figure 23. Spruce grouse harvest estimates in Montana since 1967.