New York State
Department of Environmental Conservation

Division of Fish, Wildlife, and Marine Resources
Bureau of Wildlife, June 1999

SUMMARY
A TEN-YEAR MANAGEMENT PLAN FOR RING-NECKED PHEASANTS IN NEW YORK

George E. Pataki, *Governor*

John P. Cahill, *Commissioner*

THE MISSION OF THE BUREAU OF WILDLIFE

To provide the people of New York the opportunity to enjoy all the benefits of the wildlife of the State, now and in the future. This shall be accomplished through scientifically sound management of wildlife species in a manner that is efficient, clearly described, consistent with law, and in harmony with public need.

THE GOALS OF THE BUREAU OF WILDLIFE

Goal 1. Assure that populations of all wildlife in New York are of appropriate size to meet all the demands placed on them.

Goal 2. Assure that we meet the public desire for: information about wildlife and its conservation, use, and enjoyment; understanding the relationships among wildlife, humans, and the environment; and clearly listening to what the public tells us.

Goal 3. Assure that we provide sustainable uses of New York's wildlife for an informed public.

Goal 4. Minimize the damage and nuisance caused by wildlife and wildlife uses.

Goal 5. Foster and maintain an organization that efficiently achieves our goals.

PHEASANT PROGRAM VISION

To meet the current and future needs of people for pheasant hunting, observation, and educational opportunities within biological constraints and consistent with available funding.

WILD PHEASANT MANAGEMENT GOAL

Increase wild pheasant populations in suitable range through sound habitat improvement practices and regulations, within fiscal and land use constraints.

ARTIFICIALLY PROPAGATED PHEASANTS GOAL

To provide artificially propagated pheasants in areas of the state where there are limited opportunities to enjoy wild pheasants within fiscal and land use constraints.

ACKNOWLEDGMENTS

The revision of the 1979 Long Range Management Plan for Pheasants in New York began in 1993 with the formation of a pheasant plan revision team. As coordinator of the revision process, I quickly realized the many difficulties this task presented the team. Almost annually, the team battled changing fiscal policies, announcement of program closures, and staff retirements or reassignments. Team members also had many program responsibilities other than pheasants included in their yearly work plans.

Our organization was changing, as were the methods used to solicit public input in our decision making processes. There were also administrative changes that included three different Department commissioners and three different Division directors during development of this pheasant plan. Throughout these changing times, a number of dedicated biologists and technicians brought their many skills, experiences, ideas, and beliefs to our discussions. They reviewed all the public comments, respected everyone's ideas, and worked toward preparing a realistic and workable pheasant plan. I would like to specifically thank the following members of the team for their efforts: John Major, Mark Kandel, Lance Clark, Mike Stickney, Tom Raffaldi, Kent Sanders, Art Kirsch, Dave Serbonich, Robert Yager, Jack Moser, Jeff Smith, Al Hicks, Patrick Martin, Art Johnsen, Mike Cavanaugh, Lisa Rarick, Eileen Stegeman, and Jake Warnken. I would especially like to acknowledge John Major for his organizational ideas, editing, creative thinking, for asking the hard questions, and for helping me to become a better writer and an objective thinker. Lastly, I would be remiss if I did not thank the many organizations and individuals that contributed their thoughts and ideas about pheasants and pheasant management. You made us think of your needs! This is your plan.

Sincerely,

Michael J. Murphy
Pheasant Plan Coordinator

EXECUTIVE SUMMARY

HISTORY

The ring-necked pheasant is a popular game bird that inhabits fertile agricultural areas generally associated with grain farming. The sporting quality of this non-native species prompted releases across North America in the late 1800's and early 1900's. In 1968, approximately 272,000 hunters harvested 521,000 pheasants in New York State. More hunters hunted pheasants than any other small game species. When pheasant numbers drastically declined in the 1970's, hunters and Department of Environmental Conservation staff agreed a management plan was necessary to identify the reasons for the decline and to develop management strategies. As a result, the Long Range Management Plan for Ring-necked Pheasants in New York was adopted in 1979. To support the plan's objectives, a research project was developed that included 27 new and ongoing studies. Most of these studies were supported by Federal Aid in Wildlife Restoration funds.

EVALUATION AND NEW RESEARCH

In 1993, a team of technicians and biologists from the Bureau of Wildlife set out to revise the Long Range Management Plan for Ring-necked Pheasants in New York. The revision process was guided by the Bureau of Wildlife's mission and goals and included: a review of the old plan and new literature; a communication plan to acquire input from organizations and individuals interested in pheasants; and development of strategic and operational plans to guide pheasant management for ten years.

An evaluation of the 1979 plan research projects and new literature provided a number of valuable findings. New York hen pheasants were found to be reproductively sound and comparable to hen pheasants in the midwest. High hen pheasant mortality was the result of predation generally attributed to poor quality habitat. Research found that the addition of permanent grassland cover increases pheasant populations and benefits other grassland species of wildlife as well. Federal agricultural programs that set-aside undisturbed grasslands for long periods of time and provide protection of adjacent wetlands are extremely beneficial and have proven to be the most effective for increasing pheasant populations. The downside of extensive grassland management is the associated costs. Most state agencies have little available funding for large habitat projects.

The Department's cooperative pheasant rearing and release programs continued to secure strong support from hunters and landowners. Pheasant releases were scheduled to increase harvest rates. Adult pheasants released just prior to and during the hunting season provide higher harvest rates than those released months earlier. Evaluation of the Young Pheasant Release Program showed a high level of cooperator satisfaction with the observational opportunities provided by released pheasants. A great number of people enjoy seeing, hearing, releasing, and hunting pheasants. So much so, that the suggested release of other strains of pheasants is common. To date, establishing self-sustaining pheasant populations by releasing other strains of pheasants has been largely unsuccessful and costly in New York and in other states.

PUBLIC PARTICIPATION

The review of the previous pheasant plan and new literature was helpful in understanding pheasant management past and present. The next step was to find out what the people interested in pheasants desired and how they would like pheasants managed. A multi-phased communication plan was developed to solicit input. First, nine organizations with different interests were contacted to help define issues and review draft materials developed as background information. These organizations were: Pheasants Forever, Conservation Fund Advisory Board, Farm Bureau, Soil and Water Conservation Districts, National Audubon Society, American Society for the Prevention of Cruelty to Animals, New York Conservation Council, Cornell Cooperative Extension, and the Fish and Wildlife Management Act Board. Comments received from these groups were summarized.

The next step was to mail the summary of comments, a fact sheet about pheasants and a response form to approximately 700 stakeholders identified as having a primary interest in pheasant management. One hundred sixty-eight responses were returned and the comments categorized by issues such as habitat, propagation, predators, funding, economics, and miscellaneous comments. The team reviewed the comments and proceeded to develop a revised pheasant plan based on the review of the old plan, new literature, and stakeholder desires. The result was the Draft Long Range Management Plan for Ring-necked Pheasants in New York completed in June 1996.

In the third phase of the communication effort, the June 1996 draft plan or a summary of the draft plan was mailed to an expanded stakeholder list for evaluation. Over 1,500 stakeholders received the draft material and each was asked to provide comments. One hundred thirty people responded to the draft plan about issues including funding, propagation, support for the plan, habitat, predators, and other miscellaneous issues. The revision team evaluated stakeholder comments regarding the draft pheasant plan and prepared a final document.

THE PLAN

The final document contains strategic and operational plans, and a time frame for program implementation. The strategic plan describes the goals and objectives developed as a result of evaluating the 1979 plan, a literature review of pheasants and their management, and input from stakeholders. The operational plan contains the specific activities necessary to achieve goals and objectives, while the time frame for program implementation assures compliance with the plan objectives. Specific activities outlined in the operational plan for wild pheasant management include: delineation of pheasant range; establishment of working relationships with staff and others involved in providing input to federal agricultural policies and programs which may affect pheasants; establishment of a working group of organizations interested in plants and animals dependent on grasslands; identification of public lands with potential for pheasant habitat work; and $10,000 annually to purchase warm and cool season grass seed and shrubs for habitat projects.

Artificially propagated pheasant activities include; the production and distribution of 25,000 adult pheasants, 15,000 young pheasants, and 60,000+ day-old pheasants; rehabilitation of game farm facilities; breeder flock improvement; improved release site information for hunting opportunity; and birds for National Field Trials. Information and education activities are recommended to provide technical information to those interested in pheasant management. They include; establishment of habitat demonstration areas; development of literature describing habitat development and

maintenance; and production of exhibits and slide presentations describing the history, status, and future management of pheasants in New York. A number of activities help monitor pheasants and guide management decisions. For example: banding young pheasants, continuance of the farmer pheasant inventory, a small game telephone survey to estimate harvest and participation, and a survey of hunters to determine attitudes, behaviors, desires, activities and satisfaction of pheasant hunters.

CONCLUSION

If agricultural programs in New York do not benefit pheasants and forests continue to replace farmlands, the future of the wild pheasant is dim. One wildlife biologist said, "Pheasants, as we once knew them, will never exist in New York. Unless our economic and social conditions change dramatically, there will be no return to the type of agricultural setting that once made pheasants a prominent species in New York." The pheasant plan revision team recognized the limitations land use changes place on all species and therefore prepared this pheasant management plan in accordance with the following Pheasant Program Vision: **To meet the current and future needs of people for pheasant hunting, observation, and educational opportunities within biological constraints and consistent with available funding**. The plan should be considered a flexible document, in that as peoples' desires for pheasants change and new research material becomes available, amendments to the plan may occur. The revision team recognizes that not all stakeholders agree with the management strategies proposed, but that the content of the plan is a realistic approach to meet the needs of a varied audience while taking into account the many biological, fiscal and social constraints associated with wildlife management.

WHAT WE KNOW ABOUT PHEASANTS AND THEIR MANAGEMENT

WILD PHEASANTS

- Pheasant range is shrinking due to forestation of marginal habitat. Range would best be delineated by Wildlife Management Unit Boundaries.

- The Farmer Pheasant Inventory is adequate to monitor wild pheasant population trends in the Lake Plain of western New York. It accurately depicted the decline of the wild pheasant population in the early 1970's.

- Cock pheasant hunting mortality in primary pheasant range has decreased due to a declining pheasant population and declining hunting pressure.

- Severe winter weather is usually followed by poor pheasant production.

- Fallow grasses are the most important cover type associated with pheasants. These grasses are best provided by agricultural programs that set-aside large tracts of undisturbed grasslands for long periods of time.

- Pesticides do not seem to limit pheasant abundance but should continue to be monitored periodically.

- Wild trap and transferred pheasants may speed the recovery of pheasant populations depressed

from severe winter weather. However, release of trap and transferred stock is expensive and recovery from severe winter weather will occur naturally without intervention and its added costs.

- The addition of permanent grassland cover does increase pheasant numbers. Switchgrass was particularly important as nesting and wintering cover.

- Widespread or large scale grassland establishment for single species management is cost prohibitive for a state agency.

- Predators are the direct cause of most of the pheasant mortality. Suitable habitat would reduce the effects of predation by providing protection and increasing numbers of alternate prey species.

ARTIFICIALLY PROPAGATED PHEASANTS

- Releasing adult pheasants just prior to and during the pheasant hunting season results in higher harvest rates than pheasants released months earlier.

- Adult pheasant stocking is strictly for hunting recreation and is not intended to increase wild pheasant populations.

- The harvest rate of adult pheasants is generally greatest on controlled use areas.

- Cooperative rearing programs do not provide the most birds-in-the-bag, but instead emphasize participation, natural history, observation, access to private lands and hunting opportunity for wilder birds.

Public Cooperation in Management

- Cooperation between agencies and hunters yield programs not attainable by any single organization.

PROPOSED 10 YEAR PLAN FOR PHEASANT MANAGEMENT

WILD PHEASANT MANAGEMENT ACTIVITIES

1. Delineate primary, secondary, marginal, urban and non-pheasant range using data from the U.S. Census of Agriculture, Farmer Inventory data, Geographic Information System and other information. Amend hunting regulations regarding cock-hen and season lengths according to range classification policies adopted in the 1979 plan with support of local hunters.

2. Establish working relationships with DEC staff and others involved in providing input to federal agricultural policies and programs which may affect wild pheasants.

3. Establish a working group composed of representatives of DEC and other organizations interested in plants and animals dependent on grasslands for their existence. The purpose of this group is to coordinate efforts, information and resources relating to grassland habitats.

4. Identify areas on public lands with potential for pheasant habitat improvement. Work with the appropriate agencies to improve pheasant habitat on lands that they administer.

5. Provide at least $10,000 annually to purchase warm and cool season grass seed and shrubs for distribution to private land owners to improve nesting and winter cover for pheasants.

ARTIFICIALLY PROPAGATED PHEASANT ACTIVITIES

Game Farm Administration

1. Provide staffing adequate to maintain annual game farm production.

2. Continue to raise 25,000 adult pheasants, 15,000 young pheasants, and 60,000+ day-old chicks. Program allocations may be adjusted according to the demand for young pheasants.

3. Rehabilitate and improve hatching, brooding and outdoor rearing facilities.

4. Develop a breeder flock improvement program on each game farm aimed at increasing wild pheasant behavioral characteristics in game farm reared pheasants using Manchurian strain and wild trapped pheasants.

5. Move all young pheasants from brooder houses to outdoor pens at least one week before release to help acclimate them to new environmental conditions.

6. Examine the genetic make-up of wild pheasants, Manchurian pheasants and game farm stock for historical records and possible application for management.

Distribution of Propagated Pheasants

1. Release adult pheasants in all pheasant range immediately prior to and throughout the hunting season to provide the best return to the bag.

2. Provision of up to 600 adult pheasants for National Championship Field Trials. Trials will take place no more than three weeks before the regular pheasant hunting season.

3. Provide adult pheasant release site information on state lands in the hunting syllabus and private lands through DEC regional offices.

4. Provide a listing of the young pheasant release sites available on request from DEC regional wildlife managers.

5. Develop standard criteria for evaluating release sites to ensure approval of the sites that provide for the best survival of young pheasants and day-old chicks. The criteria should be consistent from region to region for various ecological zones or land use types.

6. Provide adequate staffing to distribute 15,000 young pheasants, 60,000+day-old pheasant chicks, and to stock 25,000 adult pheasants annually.

INFORMATION AND EDUCATION ACTIVITIES

1. Revise the Landowners Manual for Ring-necked Pheasant Habitat Improvement.

2. Provide literature on the creation, enhancement, and maintenance of pheasant habitat.

3. Develop habitat improvement demonstration areas on each state game farm.

4. Publish the results of the Pilot Habitat Management Study for Ring-necked Pheasants in New York.

5. Develop portable exhibits, a video, and a slide presentation describing the history, status, and future management of the ring-necked pheasant in New York.

6. Provide technical information describing the survival, mortality, and potential harvest of pheasants released through the various propagation programs.

7. Provide a list of private sector game bird breeders and shooting preserves for individuals interested in purchasing pheasants of various ages and for hunting during the extended seasons provided by shooting preserves.

MONITORING OF PHEASANT SUPPLY AND DEMAND FOR RECREATIONAL AND OTHER USE ACTIVITIES

1. Use the Small Game Telephone Survey to annually estimate the harvest and number of hunters participating in pheasant hunting.

2. Band all young pheasants released by the Department for three years (1995-97) as recommended by the Young Pheasant Release Program evaluation.

3. Develop an annual rearing and release report for the Young Pheasant Release Program and Day-old Pheasant Chick Cooperators to be completed by cooperators that indicates the number of hunters pursuing released pheasants, the number harvested, and other desirable program information.

4. Conduct the farmer pheasant inventory survey as an index to annually monitor wild pheasant populations in primary range.

5. Conduct midwinter flushing and other field surveys as needed to assess local pheasant population response to habitat management.

6. Periodically monitor pesticide levels in pheasants.

7. Survey small game hunters to determine attitudes, behaviors, desires, activities and satisfaction of pheasant hunters. Use survey information to improve management decisions and provide representative input for plan revision in ten years.

OTHER PHEASANT MANAGEMENT ALTERNATIVES EXAMINED BUT DETERMINED UNACCEPTABLE: STATEMENTS AND RESPONSES

STATEMENT - Eliminate or reduce pheasant propagation and use the money for habitat improvement.

RESPONSE - The 500-600 thousand dollars spent annually on propagation would provide few wild pheasants as a result of habitat improvements. In addition, without stocking pheasant hunting opportunity would be eliminated in secondary, marginal, and non-pheasant range. Our habitat study (1985-1990) showed that over $4,000,000 would need to be spent annually for 10 years to provide a minimum of 5% grassland area and increase pheasant populations in the Lake Plains of western New York. At a cost of $285/acre, which includes the establishment of grasses, land rental and overhead, approximately 1,754 acres (2.7 sq.mi.) could be put into grasslands with $500,000. These grasslands would be 5% of a total land area of 35,080 acres or 54.8 square miles. Forty to fifty birds per square mile could be expected resulting in a fall population of 2,192-2,740 pheasants. Only half of these birds could be legally hunted because of cock only hunting regulations in prime range. According to the habitat study, if land rentals and agency overhead can be eliminated, switchgrass and cool season grasses could be established for approximately $173 and $109 per acre. The amount of acreage in grasslands would nearly double.

STATEMENT - Introduce subspecies of pheasants, such as the Sichuan, to increase pheasant populations.

RESPONSE - The release of other subspecies of pheasants has been largely unsuccessful throughout the United States. Here in New York, the release of Korean and Japanese Green pheasants each met with failure. The State of Michigan has been releasing a subspecies called the Sichuan pheasant since 1987. The impact of these releases is not clearly understood. Initially, the results were encouraging, but apparently high mortality due to predation has caused a decline in the Sichuan population on one study area. We will continue to monitor the results of experimental releases in other states and will consider any which prove successful for application in New York.

STATEMENT - Let individuals and private organizations provide the funding for habitat improvement.

RESPONSE - Individuals and organizations interested in pheasant habitat improvement may be able to provide local benefits for pheasants, but history has shown that federal agricultural programs have the greatest influence on pheasants and other wildlife populations on a large scale. The federal Conservation Reserve Program (1985), for example, has retired over 36 million acres of agricultural land in the U.S. at an annual cost of 1.8 billion dollars. North Dakota alone has retired over 3 million acres and doubled their pheasant population since the program was enacted. Although individuals and private organizations like Pheasants Forever and Ducks Unlimited cannot muster similar dollars, they can spend money to inform and recruit participants in federal programs using private funds. They can also lobby for farm bills sensitive to the needs of pheasants and form partnerships with state and federal agencies.

STATEMENT - Do nothing for pheasants because they are an introduced species.

RESPONSE - Pheasants have been a part of the New York landscape since the early 1900's. Although an exotic, it is one of the most popular wildlife species in the state and in demand for its sporting quality. To do nothing for pheasants would be in opposition to our goals of meeting the public desire to use New York's wildlife and assuring populations are of appropriate size to meet all the demands placed on them.

STATEMENT - Charge for a mandatory upland game bird stamp with proceeds going for upland game bird habitat improvement. Charge for a mandatory pheasant stamp to hunt state reared pheasants.

RESPONSE - Legislation is necessary to establish stamps and fees. This would require support from organized hunters. Special interest stamps are more cumbersome to administer and provide less flexibility in funding a comprehensive fish and wildlife management program. Advocates of special interest stamps also face a possibility of significantly reduced levels of program if revenues from these stamps fall short of expectations.

STATEMENT - Eliminate the pheasant propagation program and find other uses for the farms.

RESPONSE - Hunters view pheasant stocking as a tangible product for their license dollar and continue to demand stocking. Elimination of the pheasant propagation program would most likely prompt some to abandon hunting and indirect economic benefits to localities (i.e. restaurants, gas stations, sporting goods stores) would be reduced. The importance of state propagated pheasants to pheasant hunters becomes more apparent when wild pheasant populations are depressed. In many areas of the state, they offer the only public opportunity to hunt pheasants. Annual stocking and cooperative rearing programs help maintain interest in pheasants, pheasant hunting, and habitat improvement.

STATEMENT - Buy all propagated pheasants from private game bird breeders.

RESPONSE - The 1983 Game Farm Rehabilitation Task Force (unpublished data) report rejected the purchase of birds as a viable alternative for this state's stocking program. Many of the same reasons apply today. They include: poor quality birds, difficulty in locating breeders able to provide the numbers of birds required, unfilled contracts and the possibility of no birds for stocking, and high administration costs. The quality control maintained at the farms would be lost and the programs offered today (Day-old Chick Program, Young Pheasant Release Program, and Adult Release Program) would be difficult or impossible to present in their current form. Staff time and costs associated with program administration, recruitment of cooperators, and distribution of pheasants are not reflected in market costs of privately reared pheasants. Purchasing birds would most likely reduce customer satisfaction.

STATEMENT - Close the state game farms and let the private shooting preserves meet the demand for hunting propagated pheasants.

RESPONSE - The opportunity to hunt on private shooting preserves becomes cost prohibitive for most individuals looking to spend time afield hunting processing, trained bird dogs, and many other amenities. Individuals pursuing state released birds may have to contend with over-crowded release sites, making reservations to hunt, and no guarantees of finding and harvesting birds. State and

private enterprise compliment each other in meeting the demand for pheasant hunting by a diverse constituency. Elimination of the game farms would most likely decrease the number of days spent hunting pheasants and terminate participation for some.

STATEMENT - Removal of predators is necessary to increase the wild pheasant population.

RESPONSE - Our studies show that great-horned owls, red-tailed hawks and red and gray foxes are the primary predators of pheasants. In a radio telemetry study of hen pheasants in western New York, 94% of the mortality was by predation. The key to pheasant survival is not predator removal, but improvement of pheasant habitat. The high mortality from predation in the winter and during spring dispersal results from the lack of winter cover (cattail swamps, brushy areas, hedgerows) and fallow grasslands for spring nesting cover, and the distance traveled to reach suitable cover. Programs like the Conservation Reserve Program, that set-aside land for ten years, have increased pheasant abundance without controlling predators. The harvest and populations of fur-bearing predators are largely regulated by the supply and demand of the international fur market. Low fur prices will generally result in a reduced furbearer harvest. The Department does not control the demand or price for furs. Therefore, controlling predator populations is difficult. Even if predator removal were desirable, the legal status of each predator species must be examined. Birds of prey are protected by state and federal laws and many mammals have rules governing their harvest.