

# FEASIBILITY STATEMENTS FOR RUFFED GROUSE GOALS AND OBJECTIVES

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**Goal:** Increase the quality and quantity of Ruffed Grouse habitat; increase the Ruffed Grouse population; and increase the quality of Ruffed Grouse hunting opportunity in Maine.

**Population Objective:** By 2017, increase the statewide Ruffed Grouse population to a level that will sustain an annual harvest of 800,000 birds.

Capability of Habitat: The author of the 1985 Ruffed Grouse Assessment used a harvest rate of approximately 50% (of the estimated fall population) to calculate allowable harvests of Ruffed Grouse. A harvest rate of 50% applied to the 2015 calculated projection of Maine's potential Ruffed Grouse population (based on forest cover statistics) yields an allowable harvest of approximately 870,000 grouse, divided nearly equally between the industrial forest and forest/agriculture/residential regions. If all assumptions used to calculate Ruffed Grouse habitat and population for the current assessment are correct, and if a harvest rate of 50% is sustainable, then the habitat (current and projected) is capable of sustaining an annual harvest of 800,000 grouse through 2015.

Feasibility: It is not known whether the Population Objective is feasible. The department first would need to accurately estimate annual harvests of Ruffed Grouse in order to determine the current level of harvest relative to the objective. If the current level of harvest is lower than 800,000 per year, the department would need to estimate current harvest rates, and determine whether the population is capable of sustaining a harvest rate that would provide an annual kill of 800,000 birds.

Desirability: A Ruffed Grouse population that could sustain annual harvests of 800,000 grouse likely would be desirable to consumptive users of the Ruffed Grouse resource; however, the size of recent annual harvests is unknown, so it is not possible to determine if an annual harvest of 800,000 would represent an increase from recent harvests.

Possible Consequences: Determining whether Maine supports a Ruffed Grouse population that can sustain an annual harvest of 800,000 would require the department to collect data on statewide annual harvests, harvest rates, and perhaps population densities in various forest cover types.

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Acquiring this information would require a redistribution of personnel time and additional financial resources.

### **Habitat Objective 1: By 2017, increase and then maintain the quantity and quality of Ruffed Grouse habitat in the industrial forest region of Maine by 100% from 2002 levels<sup>1</sup>.**

Capability of Habitat: 1995 data indicate that approximately 96% of land in the industrial forest region was in forest cover types deemed potentially suitable as grouse habitat (nearly all cover types). Much of the existing forest cover is low quality grouse habitat, but there exists potential for substantially increasing the quality of grouse habitat in this region via forest management for early successional hardwoods.

Feasibility: The carrying capacity of grouse within Maine's industrial forest region depends on the composition and structure of those forests, which is influenced largely by forestry practices; due to the small proportion of publicly owned land, management practices on public lands will be relatively insignificant. Forest management in Maine will depend to a large extent on market demands, as well as forestry regulations; MDIFW staff have had little or no influence on the development of forestry regulations in recent times. Demand for pulpwood and sawlogs in the Northeast is projected to increase at least through 2010; however, the practice of clear-cutting, which is effective in regenerating grouse habitat (e.g. early successional hardwoods), decreased in use by nearly 70% during 1990-1996. Increased demand for hardwood pulp, and forestry regulations that would not inhibit effective management of early-successional hardwoods would improve the feasibility of Habitat Objective 1.

Desirability: Increasing and maintaining the quantity and quality of Ruffed Grouse habitat in the industrial forest region of Maine by 100% would be desirable to both consumptive and nonconsumptive users of the grouse resource. Management to increase and maintain grouse habitat also would benefit other important wildlife that use early successional forest habitats.

Possible Consequences: Management to increase and maintain grouse habitat also would benefit other important wildlife that use early successional forest habitats. Management to increase and maintain early successional forest habitat for grouse may be at the expense of mature-forest products, habitat, and associated species. Department staff time for additional responsibilities in this area is limited.

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<sup>1</sup> Wildlife Management Districts in the industrialized forest region include WMDs 1, 2, 4, 5, 7, 8, 9, 10, 14, 18, and 19.

**Habitat Objective 2: By 2017, increase and then maintain the quantity and quality of Ruffed Grouse habitat on suitable, state-owned wildlife management areas by 100% from 2002 levels.**

Capability of Habitat: The area of forest on state-owned wildlife management areas that currently (2002) is being managed for grouse is not known. However, it is probable that the area of patch cuts and alder regeneration on state WMAs could be doubled by 2017.

Feasibility: Increasing the area of land that is managed for grouse by 100% from 2002 levels on state-owned WMAs would be feasible if the department's Forest Management Environmental Assessment is approved by the U.S. Fish and Wildlife Service, and if the department is able to devote sufficient staffing and funds toward management of early successional hardwoods on WMAs.

Desirability: Increasing and maintaining the quantity and quality of Ruffed Grouse habitat on state-owned WMAs by 100% would be desirable to both consumptive and nonconsumptive users of the grouse resource. Management to increase and maintain grouse habitat also would benefit other important wildlife that use early successional forest habitats.

Possible Consequences: Management to increase and maintain grouse habitat also would benefit other important wildlife that use early successional forest habitats. Land managed for early successional wildlife habitat could be used to demonstrate wildlife habitat management to a variety of consumptive and nonconsumptive wildlife users, including landowners who may consider managing their own land for grouse. Management to increase and maintain early successional forest habitat for grouse may be at the expense of mature-forest products, habitat, and associated species. Department staff time for additional responsibilities in this area is limited.

**Habitat Objective 3: By 2017, increase and then maintain the quantity and quality of Ruffed Grouse habitat in the forest/agriculture/residential region of Maine by 50% from 2002 levels<sup>2</sup>.**

Capability of Habitat: 1995 data indicate that approximately 84% of Maine's land area was in forest cover types deemed potentially suitable as grouse habitat (nearly all cover types). Much of the existing forest cover is low quality grouse habitat, but there exists potential for substantially increasing the quality of grouse habitat in this region via forest management for early successional hardwoods.

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<sup>2</sup> Wildlife Management Districts in the forest/agriculture/residential region include WMDs 3, 6, 11, 12, 13, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, and 30.

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Feasibility: The carrying capacity of grouse within Maine's forest/agriculture/residential forest region depends on the composition and structure of those forests, which is influenced largely by forestry practices; due to the small proportion of publicly owned land, management practices on public lands will be relatively insignificant. Forest practices in Maine will depend to a large extent on market demands, forestry regulations, and the desires of landowners. Demand for pulpwood and sawlogs in the Northeast is projected to increase at least through 2010. However, the practice of clear-cutting, which is effective in regenerating grouse habitat (e.g. early successional hardwoods), decreased in use by nearly 70% during 1990-1996; MDIFW staff have had little or no influence on the development of forestry regulations in recent times. Many small, non-industrial owners have no intention of harvesting timber, and many landowners are unaware of forest practices that would benefit wildlife. Increased demand for hardwood pulp, forestry regulations that would allow for effective management of early-successional hardwoods, and public education and landowner outreach about managing forests for early-successional wildlife would improve the feasibility of Habitat Objective 1. Public education and landowner outreach would require a redistribution of personnel time and additional financial resources.

Desirability: Increasing and maintaining the quantity and quality of Ruffed Grouse habitat in the forest/agriculture/residential region of Maine by 50% would be desirable to both consumptive and nonconsumptive users of the grouse resource. Management to increase and maintain grouse habitat also would benefit other important wildlife that use early successional forest habitats.

Possible Consequences: Management to increase and maintain the grouse habitat also would benefit other important wildlife that use early successional forest habitats. Management to increase and maintain early successional forest habitat for grouse may be at the expense of mature-forest products, habitat, and associated species. Department staff time for additional responsibilities in this area is limited.

**Outreach Objective: By 2005, and in conjunction with partners, develop and implement a program to increase the awareness and understanding of Ruffed Grouse, its habitat requirements, and its importance as a game species in Maine.**

Capability of Habitat: Not applicable.

Feasibility and Desirability: Heightened awareness and appreciation of Ruffed Grouse, its habitat, and its importance as a game species in Maine are both feasible and desirable, but would require a redistribution of

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personnel time and additional financial resources to accomplish. Feasibility of this objective would be increased by adapting existing educational materials and resources for use in Maine, and by improving wildlife extension capabilities within Maine.

Possible Consequences: Department staff time for additional responsibilities in this area is limited.

**Hunting Objective 1: By 2003, establish a baseline of hunter satisfaction and by 2007, ensure that at least 75% of hunters surveyed who hunt in the industrial forest region of Maine rate their hunting experience as good or better.**

Capability of Habitat: Not applicable for establishing baseline. Habitat quantity, quality, distribution, and availability to hunters will affect hunter satisfaction, however, the precise relationship between current levels of these habitat attributes and the current level of hunter satisfaction is not well understood.

Feasibility and Desirability: Establishing a baseline of hunter satisfaction is both desirable and feasible. Researchers at the University of Maine (Teisl et al. 1992) conducted a survey of upland bird hunters, and determined that 47% of residents and 68% of nonresidents categorized the 1988 upland bird hunting season as “good” or better. A survey of upland bird hunters in 2002 or 2003, for the purpose of establishing a baseline of hunter satisfaction, should follow similar methods as the 1988 survey so that results will be directly comparable. Additionally, the survey should be designed to enable identification of factors that affect hunter satisfaction so that the department may manage these factors to improve hunter satisfaction. Ensuring a satisfaction level (i.e. “good” or better) of 75% is desirable, but its feasibility will depend on many factors, some of which (e.g., weather during hunt, inclement weather during nesting/brood rearing that affects chick survival, posting of land) are not under the department’s direct control; hunter satisfaction will undoubtedly vary among years due to stochastic factors.

Possible Consequences: Information regarding statewide grouse harvests, and similar information on woodcock hunter satisfaction and woodcock harvests could be gathered during the same survey. Department staff time and funding for responsibilities in this area currently are limited.

**Hunting Objective 2: By 2003, establish a baseline of hunter satisfaction and by 2007, ensure that at least 75% of hunters surveyed who hunt in the forest agricultural/residential region of Maine rate their hunting experience as good or better.**

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Capability of Habitat: Not applicable for establishing baseline. Habitat quantity, quality, distribution, and availability to hunters will affect hunter satisfaction, however, the precise relationship between current levels of these habitat attributes and the current level of hunter satisfaction is not well understood.

Feasibility and Desirability: Establishing a baseline of hunter satisfaction is both desirable and feasible. Researchers at the University of Maine (Teisl et al. 1992) conducted a survey of upland bird hunters, and determined that 47% of residents and 68% of nonresidents categorized the 1988 upland bird hunting season as “good” or better. A survey of upland bird hunters in 2002 or 2003, for the purpose of establishing a baseline of hunter satisfaction, should follow similar methods as the 1988 survey so that results will be directly comparable. Additionally, the survey should be designed to enable identification of factors that affect hunter satisfaction so that the department may manage these factors to improve hunter satisfaction. Ensuring a satisfaction level (i.e. “good” or better) of 75% is desirable, but its feasibility will depend on many factors, some of which (e.g., weather during hunt, inclement weather during nesting/brood rearing that affects recruitment to the fall population, posting of land) are not under the department’s direct control; hunter satisfaction will undoubtedly vary among years due to stochastic factors.

Possible Consequences: Information regarding statewide grouse harvests, and similar information on woodcock hunter satisfaction and woodcock harvests could be gathered during the same survey. Department staff time and funding for responsibilities in this area currently are limited.