

**Alberta Conservation Association
2008/09 Project Summary Report**

Project Name: *Upland Habitat Enhancement Project (Pothole Creek)*

Wildlife Program Manager: Doug Manzer

Project Leader: Brad Taylor

Primary ACA staff on this project:

Mike Uchikura, Brad Taylor, Randy Lee, Robb Stavne and Doug Manzer

Partnerships

Pheasants Forever – Calgary Chapter

Key findings:

- 5.5 acre reproductive cover enhancement project completed
- 3.5 acre reproductive cover enhancement project initiated
- 12 page educational brochure on pheasant biology finalized
- Collaborative partnership established with Pheasants Forever – Calgary Chapter

Abstract

Upland birds are highly valued by the public, with pheasants, sharp-tailed grouse and Hungarian partridge tightly woven into the fabric of hunting tradition in Alberta. These species rely on upland habitat for the resources important for rearing broods and surviving our harsh Alberta winters. While early agricultural expansion may have provided additional resources for some species (forage), the net loss of habitat has decreased the area suitable for hiding a nest or rearing a brood. In spite of these changes, pheasants and Hungarian partridge appear capable of adapting to cultivated landscapes as long as key habitat components are in place. The focus of this long-term initiative is to identify areas in southern Alberta where we can enhance and re-establish remnant areas suitable for nests, brood rearing, travel corridors and winter cover in juxtaposition with one another.

We worked with private landowners, counties, and other agents of land tenure to enhance upland habitat. In 2009, we will combine efforts with the Land Management program and use properties managed by ACA for demonstrating enhancement activities to private landowners, and in some cases to serve as anchor properties to focus efforts on nearby private land. In 2008, we have also partnered with Pheasants Forever to meet the common objectives of both organizations.

While still in the initial stages, we undertook an enhancement project on 15 acres of land along Pothole Creek. An initial 5.5 acres was disked and reseeded to forbs and legumes to enhance brood cover, while an additional 3.5 acres was mowed in preparation for reseeding for nesting cover. We also developed an education brochure to distribute to landowners and the general public that will describe the habitat needs of a pheasant throughout the year.

Introduction

Agriculture is an important component of Alberta's economy that has seen many changes since the 1950s. Census information indicates that the number of farms is decreasing, but the size of farms is increasing. These larger farms are worked with larger equipment and optimized for cereal harvest. With these efficiencies has come a general erosion of upland habitat, along with the fence rows, shelterbelts and lowland areas that provide footholds for upland birds. In particular, upland birds require habitat suitable for their reproductive efforts, travel and escape cover, as well as thermal cover during winter.

Partnerships within Alberta Conservation Association (ACA) and with other agencies and organizations will help to develop, implement, maintain, and communicate this project and make it sustainable to meet long term objectives of improving habitat values for upland gamebirds. The Land Management Program has been working on enhancing upland habitat on ACA-managed sites and is working with the Wildlife Program to provide demonstration sites and to improve habitat values adjacent to these conservation sites. We are also partnering with Pheasants Forever chapters to assist with long-term planning and funding for this project.

Methods

We focused on identifying and enhancing priority habitats for upland game birds. Priority habitats included reproductive cover (i.e., nesting and brood rearing), winter thermal cover and escape/travel cover. Identifying priority habitats involved both office and field assessments to identify potential cover types within property management boundaries and within a 1.6 km buffer around a property. We determined appropriate enhancement techniques to address the priority habitat that was currently lacking from the buffered property. We placed higher priority on sites that were only missing one or two priority habitats.

Education and information materials are critical to the promotion and sustainability of any project. One of the key components of this project was to help landowners to become aware of the importance of game birds of different habitat types throughout the year and their juxtaposition to one another. We developed a brochure outlining the different habitat needs of pheasants throughout the year.

Results

We completed the first phase on a property where nest and brood rearing habitat could be improved. A two decade old smooth brome field that was decadent and offered minimal nesting and brood rearing values was disked multiple times to set back the vegetation. We then broadcast seeded the area to a legume and forb mixture to promote insect diversity and abundance, which is critical for young chicks. The field was spot sprayed three times and mowed once to reduce thistle competition. We completed phase two preparation (mowing) on an additional 3.5 acres. We will reseed this area in 2009 to a grass mixture beneficial for nesting that will provide linkage to other nesting and wintering areas.

ACA and Pheasants Forever have generated a solid partnership from which to build this project in the future. Through this collaborative partnership, a brochure on pheasant biology that is targeted toward landowners and the general public is near completion, and will be available in summer 2009.

Conclusions

We are working with Pheasants Forever to build a long-term project focused on enhancing upland habitats for game birds in southern Alberta. We have initiated enhancement activities on a property in the Pothole Creek area south of Lethbridge, and intend to use small enhancements such as these as demonstration areas as we discuss opportunities with other landowners.

Next steps involve development of a comprehensive monitoring plan, communication with landowners, and development of relationships with other potential partners.

Communications

- Brochure - “Alberta’s Ring-necked Pheasant”, a short information brochure on the life stage requirements of pheasants.
- Presentation on pheasant life stage requirements delivered to Magrath Rod and Gun Club at their Annual Awards Banquet. March 14, 2009
- Meetings held with Pheasants Forever and Partners in Habitat Development as part of information sharing on mutual projects.

Literature cited

-

Pictures



Restoration of a two decade old smooth brome field – first pass. (Photo: R. Lee)



Restoration of a two decade old smooth brome field – four passes. (Photo: R. Lee)



Restoration of a two decade old smooth brome field – broadcast seeding. (Photo: B. Taylor)



Restoration of a two decade old smooth brome field – September 2009. (Photo: R. Lee)