

## **Alberta Conservation Association 2013/14 Project Summary Report**

**Project Name:** Habitat Legacy Partnership

**Wildlife Program Manager:** Doug Manzer

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### **Partnerships**

Alberta Hunter Education Instructors' Association  
Cycle Works Motorsports  
Hays 4H Club  
Landowners  
Municipal District of Taber  
Municipal District of Warner  
Pheasants Forever – Calgary, Lethbridge and Chinook Chapters

### **Key Findings**

- Planted approximately 2,500 shrubs to create winter habitat for pheasants and other wildlife.
- Worked with landowners and the Hays 4H Club to raise 500 pheasant chicks, which were released in suitable habitat as 20-week-old adults.
- Hosted two advisory workshops in 2013: one with world-renowned dog trainer Rick Smith on “Versatile Gun Dog Training” and the second with landowners on “How to Raise Pheasants.”
- Surveyed 152 km of high-quality habitat in late summer 2013 and flushed nearly twice as many pheasants per hour compared to the previous year. Pheasant reproduction was also greater, with roughly 1.4 times more chicks per hen.

### **Introduction**

Upland gamebirds are valued for their showy colours, breeding displays and long history in the hunting tradition of Alberta. Pheasants require a variety of habitats that provide suitable cover for nesting, brood rearing and travel. Alberta Conservation Association (ACA) and Pheasants Forever formed a partnership to improve upland bird habitats in southern Alberta. The Habitat Legacy Partnership works collaboratively with conservation groups, private landowners, irrigation districts and municipal districts to host landowner workshops, implement habitat enhancements on the landscape and monitor the effects of habitat enhancements. The goal is to

create key habitat components for pheasant and gray partridge, but we anticipate that other species will benefit as well.

## **Methods**

Engaging the public has been instrumental in raising the profile of pheasants and creating habitat enhancement opportunities. We accomplish this through presentations at landowner advisory workshops, novice shoots, distribution of pheasant chicks, public presentations and distribution of information booklets. To support enhancement activities on private land, we conduct site visits and use aerial photography to map existing and required habitat components important for nesting, brood rearing and winter cover. On an individual site basis, we prepare habitat plans and partner with landowners to enhance key habitat.

We also evaluate the long-term impacts of enhancement actions on pheasants and non-target bird species. We monitor shrub growth and mortality to determine which shrub species and planting techniques are most beneficial for developing habitat. We use a photo-point protocol that we developed to help document changes in habitat over time resulting from our habitat enhancements. Lastly, using Global Positioning System (GPS) collars attached to hunting dogs, we conduct annual pheasant and partridge surveys in southern Alberta to estimate recruitment, density and encounter rate of birds that hunters can expect during the hunting season.

## **Results**

In 2013/14, we planted approximately 2,500 shrubs, including many berry-bearing species, to provide a reliable food source and create winter cover for upland gamebirds. We continued maintenance on the approximately 15,000 trees and shrubs planted over the past four years to benefit wildlife. We calculated an average shrub survival rate of 90.7% for the shrubs planted in 2013. This year was a great year for tree and shrub growth, with average growth being 55% of its original height (measured in September 2012); many tree and shrub species doubled their height in just one growing season. Chokecherry had the greatest height increment (69.3 cm) during the 2013 growing season. We also planted 10 acres with a grass/fescue/alfalfa seed blend, which will provide brood-rearing cover for upland birds, and 10 acres to winter wheat, which will be left standing through the winter for food and cover.

We hosted two advisory workshops that were very well received. One workshop was hosted in conjunction with the Taber Pheasant Festival and Cycle Works Motorsports, with world-renowned dog trainer Rick Smith giving a field presentation on “Versatile Gun Dog Training.” The other workshop, “How to Raise Pheasants,” provided attendees with valuable information on pheasant husbandry. In partnership with Alberta Hunter Education Instructors’ Association, we assisted with a weekend of novice pheasant hunts, mentoring approximately 66 hunters on safe and ethical hunting practices, and helping each of them harvest their first pheasant.

We distributed 500 pheasant chicks to the Hays 4H Club and to private landowners. The chicks were raised to 20 weeks old and then released on habitat improvement sites that ACA has been working on or at other open public access sites that had good habitat to support pheasants.

In summer 2012 and 2013, using trained hunting dogs fitted with GPS collars, we conducted our annual pheasant and partridge survey. We flushed almost twice as many pheasants per hour in 2013 (2.59 flushes/h) compared to those flushed in 2012 (1.37 flushes/h). The encounter rate for partridges (1.59 flushes/h) was only slightly higher than in 2012 (1.37 flushes/h). When translated to distance walked, we encountered 1.07 pheasants and 0.66 partridges for each kilometre walked by the handler in 2013. Reproductive success was also higher in 2013, with roughly 1.4 times more chicks per hen compared to 2012 (3.75:1 versus 2.72:1). All together in 2013, we flushed 215 pheasants and 420 partridges over 25 hours of survey effort. As indicated by our survey and from reports we received this hunting season, 2013 was a great year for upland gamebird hunting in southern Alberta!

Table 1. Total encounters, total counts, encounter rates, chick to hen ratios, and average flock/covey sizes for ring-necked pheasant and gray partridge during the survey in August 2012 and August 2013. In 2012, total distance surveyed was 53.6 km, with a total distance of 151.7 km travelled by the pointing dogs. In 2013, total distance surveyed was 60 km, with a total distance of 149.3 km travelled by the pointing dogs.

Survey results	Ring-necked pheasant		Gray partridge	
Survey year	2012	2013	2012	2013
Total encounters	34	65	34	40
Total count <sup>1</sup>	111	215	354	420
	3 M, 29 F, 79 YOY	6 M, 44 F, 165 YOY	39 AD, 31 YOY, 284 UNK	420 UNK
Encounter rates				
<i>Flushes/hour</i>	1.37	2.59	1.37	1.59
<i>Flushes/kilometre walked – person</i>	0.63	1.07	0.63	0.66
<i>Flushes/kilometre walked – dog</i>	0.22	0.44	0.22	0.27
Chick:hen ratio	2.72:1	3.75:1	not available	not available
Average flock/covey size	3.3 birds	3.3 birds	10.4 birds	10.5 birds

<sup>1</sup>Abbreviations: M = male, F = female, YOY = young of the year, AD = adult, UNK = unknown age.

## Conclusions

The availability of key habitat components is critical to sustain pheasant populations over the long term. We will continue to foster long-term partnerships and develop relationships with key members of the agricultural community, work with private landowners on property habitat plans, host landowner events, monitor the effects of habitat enhancements, and actively work with partners to support habitat enhancement projects in southern Alberta.

## Communications

- Delivered two advisory workshops for landowners/hunters who are interested in raising pheasants and for those who are passionate about upland bird hunting with a dog.
- Delivered *Pheasants Through the Seasons* booklets and habitat plans with our logo on them to landowners.
- Assisted in a novice (youth) pheasant hunt and provided presentations on upland gamebird habitat needs.
- Set up a Habitat Legacy Partnership banner and a Pheasant Booth at the Willow Valley Horn Measuring Day and at the Taber Pheasant Festival.
- Posted the results of the pheasant survey on our website and on Twitter.
- Met with the Hays 4H Club and talked with them about pheasant habitat needs and how to raise pheasants.

## Literature Cited

N/A

## Photo Captions

A photo-point taken on the Bullock enhancement property, showing shrub growth between August 2012 (left) and August 2013 (right). Photos: Julia Wachowski



[filename:Photo1A\_HLP\_2013\_14\_BullockAug2012\_JuliaWachowski.JPG]

[filename:Photo1B\_HLP\_2013\_14\_BullockAug2013\_JuliaWachowski.JPG]





Rick Smith delivering a presentation on “Versatile Gun Dog Training” at the Taber Pheasant Festival Workshop. Photo: Mike Verhage  
[filename: Photo2\_HLP\_2013-14\_Mike Verhage.JPG]



Jid, one of the hunting dogs used during the pheasant survey, on point. Photo: Mike Uchikura  
[filename: Photo3\_HLP\_2013-14\_Mike Uchikura.JPG]





Savanna Van der Wielen of the Hays 4H Club poses with a pheasant chick that the club raised and released around the Hays area. Photo: Jaarno Van der Wielen  
[filename: Photo4\_HLP\_2013-14\_Jaarno Van der Wielen.JPG]