

Alberta's
**Ring-necked
Pheasant**



Through the Seasons





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Alberta's Ring-necked Pheasant

Through the Seasons

The Ring-necked Pheasant has been a part of Alberta's landscape for over one hundred years. A native of Asia, this colourful upland bird brings a touch of the exotic to our farmlands, rangelands, wetlands, river valleys, roadsides, yards and parks.

This booklet was developed in partnership with the Alberta Conservation Association and Pheasants Forever. It offers a glimpse into the life of Alberta's pheasants and highlights how their activities and habitat needs change through the seasons.



For additional copies of this booklet contact:

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Pheasant Facts

Over a Century in Alberta

In 1908, pheasants were introduced to Alberta, near Strathmore. The population built up slowly, augmented by additional releases of adults and chicks. By the 1930s they had become well-established, especially in the Brooks area.



Made in China

Ring-necked Pheasants are not native to North America, but were introduced from China and Japan in the late 1880s.

Hens & Roosters

Male pheasants are strikingly showy birds. They have iridescent plumage, a white ring around their neck and long russet tail feathers. The females are drabber and mottled brown. They are also smaller than the roosters. Their dull plumage is well-suited to remaining camouflaged while incubating eggs and raising young.



Prairie Life

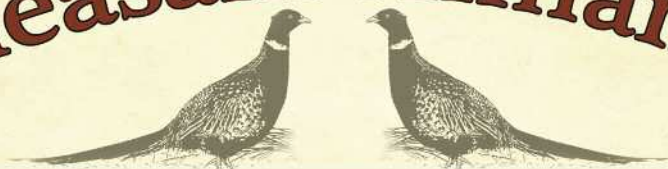
In Alberta, pheasants are mostly found in the south, preferring grasslands, river valleys, coulees, farmland and wetland edges.



One of Many

There are 35 species of pheasants in the world. The Ring-necked Pheasant (*Phasianus colchicus*) is the most common and is sometimes referred to as the Common Pheasant.

Pheasant Almanac



Pheasants need a mosaic of habitat types for feeding, nesting, raising young, escaping predators and surviving harsh winters. Their habitat requirements change with the seasons. Pheasant populations are highest where all of their seasonal requirements occur in close proximity. Examples of good year-round pheasant habitat include small farms, wetland edges and river valleys.

WINTER

December to March - Survival!

Dense vegetation is needed to provide warmth and protection, as well as fallen grain for food.

FALL

September to November
Growth & Survival

Productive food sources are required to allow fattening up and growth.

SPRING

April to May - Reproduction

Grassy fields are needed for nesting.

SUMMER

June to August - Brood Rearing

The chicks require cover to hide in and shady areas to prevent over-heating.



WINTER

Weather Stresses

Alberta winters pose many challenges for pheasants. Freezing temperatures, arctic winds, snow, ice-covered ground and a lack of food make this a risky season for the birds.

Under the Covers

Just as we dress in layers or pile on blankets to stay warm, dense vegetation cover provides warmth for pheasants in winter. Each vegetation layer adds extra insulation.

Cover is also important to provide hiding places and escape routes from hungry predators such as coyotes and birds of prey.



Both vertical and horizontal layers of cover add thermal insulation.



Winter Fat

A healthy pheasant with access to good cover can withstand blizzards for two to three days, relying on body fat for energy.

Frozen Solid

The biggest cause of winter mortality is freezing. This happens when the bird loses more heat than it can produce. In southern Alberta, with extreme winter temperatures, the one thing that is keeping the birds alive is good winter habitat.

Pheasant Dreams

At night the birds roost in low, dense cover. Ungrazed pasture and hayland, cattails and brushy cover provide good winter roosting opportunities.



Daytime Napping

During the day, the birds need taller “loafing cover” that provides insulation and protection from birds of prey. Shrubs and low-growing trees provide the best daytime roosting spots.

Having both day and night roosting areas in close proximity is ideal!



Good winter cover can reduce the amount of energy required to stay warm by 25%. This can mean the difference between life and death.



Winter Menu

Pheasants rely mostly on commercial grains in winter. Changes in farming practices have resulted in less wasted grain in fields, making it more difficult for pheasants to find winter food. Cereal grains, weed seeds and forbs are an important food source, along with corn and sunflowers where available. Food sources within 300 m of roosting areas minimize the amount of energy used for travel and reduces the risk of predation.

Hens have a harder time surviving winter than roosters. Their smaller body size means that they lose heat faster. Also, they are not as strong as roosters and have more difficulty digging through snow and ice to find food.

In January a pheasant needs food energy roughly equal to two hamburgers or three Snickers candy bars a day.

SPRING

Spring Fever

In late March, winter flocks disperse and individual birds spread out into nesting territories. Mating and nesting starts in April, with most egg-laying occurring in May.

What a Hen Wants...

The perfect nest location is an idle grassy area with last years grasses still standing upright. The tall grasses provide camouflage and shelter for her nest.

A single hen may lay more than 30 eggs in a breeding season! Many of these are laid before she has even built a nest. These eggs are dumped at random, which explains why you sometimes see a lone egg lying on the ground in an odd place. Once the hen is able to produce one egg a day, she builds a nest and fills it with one egg every morning until there are 10 to 12. At that point she starts incubating. This is a stressful time for the hen as she will spend 23 hours a day on the nest, taking only very short breaks to look for food. If all goes well, the eggs hatch 23 days later.

First is Best

Hens will re-nest if the first clutch is unsuccessful. However, having a successful first nest improves the chances of the hen and her chicks surviving the winter by up to 45%. The later the chicks hatch, the smaller they will be when winter comes around. Hens that nest late have less body fat by winter than those that nested earlier.



Good pheasant nesting habitat



Roosters crow every two to three minutes to attract hens. They may have as many as 18 hens in their harem, but usually it's only three or four.



Don't Count Your Eggs Until They Are Hatched

May temperatures are critical in determining nest success. Before the hen starts incubating her eggs, they will freeze in cold weather. If there is a cold snap before she has begun incubating, any eggs laid before or during the cold snap will not hatch. High temperatures can have a similar effect. Warmth causes the embryos to start to develop before incubation begins, and once the temperature drops to normal again, they will die.

Because of the timing, nests that are built in alfalfa fields frequently come to a tragic end. Many hens and nests are destroyed by cutting and swathing. Those that are not destroyed will likely be found by predators because of the reduced cover after haying. One option that farmers have is to plant a later maturing variety of alfalfa.

Spring Menu

Pheasants are still relying on leftover seeds in early spring. Later in the season, insects become an increasingly important part of their diet.

In addition to food, hens seek out calcium-containing grit for the calcium they need for egg production.

SUMMER

Gender Inequality

By June, the roosters are already working on gaining weight for the winter. They play no role in incubating or raising the young. The hens, however, are still hard at work and summer is all about raising their chicks.

Summer Challenges

June is the peak hatching period for pheasant eggs. The chicks are precocial, meaning that they are immediately able to run around after hatching and they leave the nest right away.

For the first two weeks, the hens brood their chicks during cold nights as the chicks cannot regulate their own body temperature. Both high and low temperatures can quickly kill a chick in its first two weeks.

Most chick mortality occurs in the first 10 to 12 days. By ten weeks, approximately half of the chicks that hatched will be dead. The main causes are extreme weather, lack of insects, predators and poor condition of the hen.

By September, when the chicks are ten weeks old, they disperse and no longer stick together in family groups.



Predation

Pheasant chicks are vulnerable to a host of predators including foxes, coyotes, skunks, raccoons, badgers, owls, hawks and falcons. The hen alerts the chicks to predators by giving a danger call. The chicks scatter and freeze when they hear this call.

Sometimes hens will adopt an abandoned or lost brood in addition to their own chicks. This is why you may sometimes see a hen with 16 to 30 chicks! They can't possibly all belong to her.

Adults and chicks are fantastic pest control agents. They eat many caterpillars, grasshoppers and grasshopper nymphs. In fact, insects make up 90% of a young chick's diet.

Chick Picks

While raising their broods, hens seek out diverse habitats with high insect densities. Annual plants tend to host more insects, making weedy patches, roadsides, shelterbelts and cropland edges favoured places for family groups. For the first three weeks chicks remain in the area around the nest and once the chicks can fly, their range expands. At night the broods roost in unmowed grasslands and weedy patches.

Shady areas are of great importance in July and August, helping to protect the chicks from soaring summer temperatures.



Growing Up On the Family Farm

Farmland that contains a diverse mix of habitats in a small area is ideal for pheasant families. The high insect densities found in these situations provides bountiful food for hungry chicks. On farms with little diversity (monoculture farms), pheasant chicks have a much lower survival rate because insect densities are low and they have to travel further in order to find enough food.

Diversity



Monoculture



Their Mother's Voice

Pheasant hens communicate with their chicks even before they hatch. The hens chirp to their eggs while incubating. This allows the chicks to recognize their mother's voice as soon as they hatch and it trains them to respond to her calls when they leave the nest.

FALL

Fall Feeding Frenzy

In the fall, there is a scramble to prepare for winter. The roosters have been taking it easy since the breeding season and already have decent fat reserves. For the hens, fall is about rebuilding fat reserves. The chicks are also busily building up body fat and by October they have reached adult size.

The primary food on the menu at this time is grain from crops. Weed seeds are also eaten, as they are relatively high in protein compared to commercial grains. Sunflower and foxtail seeds are a couple of the most favoured seeds.



Kitchen Party

Pheasants are now concentrated wherever the eating is good. Corn fields, wheat fields, weedy areas and wetland margins are preferred areas. Towards the end of the fall, they start to drift towards areas of thicker cover where they will be able to withstand the decreasing temperatures and harsher conditions.





Living on the Edge

Pheasants prefer to live on the edge - that is, the edge between different habitats. For example, the weedy edge between a crop and pasture land or the caragana row between the pasture and your yard. Most pheasants are found relatively close to a field edge. This is another reason why pheasants are attracted to small farms as they usually have more “edges.”



Expendable Roosters

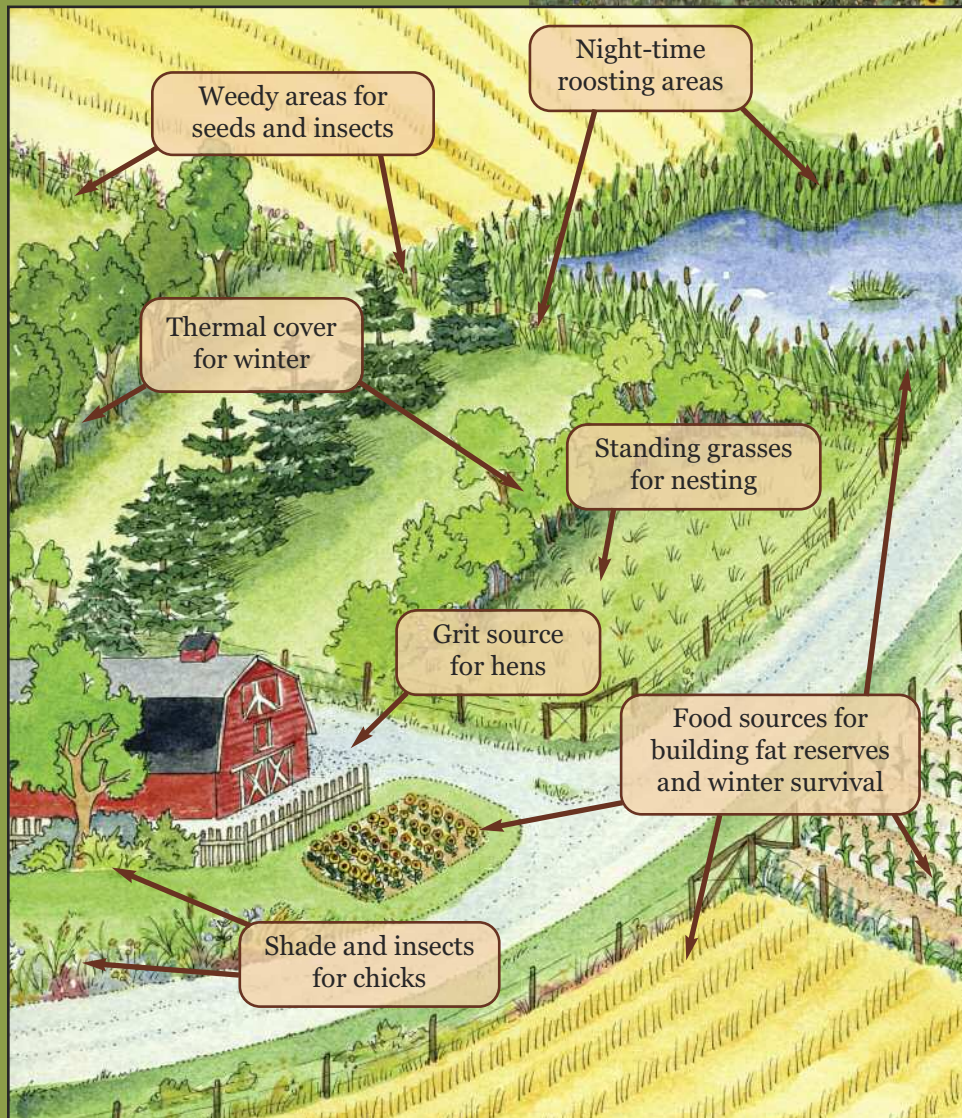
Because roosters have harems of many hens, a large proportion of roosters can be removed by hunters before the overall population suffers.

Reducing the number of roosters reduces the competition for food with the hens, who are more vulnerable to winter mortality than the roosters.

By September the hens have lost one quarter of their body weight compared to in the spring. This is because of the stress of raising a brood. In the fall, they are busy regaining their lost weight.

Location, Location, Location

Ring-necked Pheasants require a variety of habitats through the seasons, including standing grass, shrubby thickets, grain crops and shelterbelts. The ideal situation for pheasants is to have all of these habitats available in close proximity.



Contacts

Alberta Conservation Association

Formed in 1997, Alberta Conservation Association (ACA) is a not-for-profit, registered charity funded by Alberta's hunters, anglers and a growing number of corporate partners. ACA is governed by a multi-stakeholder Board of Directors represented by hunting, fishing, trapping and naturalist groups, government and First Nations', Public at Large, industry and academic representatives.



Toll-free number: 1-877-969-9091
www.ab-conservation.com

Pheasants Forever

Pheasants Forever was formed in Alberta in 1992 by a group of individuals who were concerned with the diminishing populations of upland game birds due to their declining habitat in southern Alberta. Four chapters in Calgary, Medicine Hat, Red Deer and Lethbridge participate in fundraising for the enhancement and restoration of upland habitat in areas contained within most of the irrigated lands of southern Alberta. Today the Calgary Chapter is recognized as the top fundraising Chapter for habitat in North America.



Toll-free number: 1-888-602-3777
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Credits

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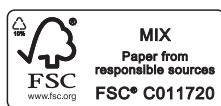
Inside Pages: All pheasant photos - Roger Hill.

Page 2: Feathers - Andy Hurly. Page 4-5: Rose hips, grasses & cattails - Liz Saunders, Shelterbelt - Mike Uchikura. Page 6-7: Plants - Liz Saunders. Page 8-9: Barn - Roger Hill, Nest - Cheryl Rankin, Aerial photos - Lorne Fitch. Page 10-11: Corn - Mike Uchikura, Skunkbush - Liz Saunders, Fall habitat photos - Sam Wirzba, Hunter - Roger Hill. Page 12: Sunflowers - Liz Saunders.



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