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Printed on 100% post-consumer recycled paper

Fondation **ECHO** Foundation
ECHO

 Fondation
de la faune
du Québec

This project was undertaken with the financial support of the Government of Canada.

Ce projet a été réalisé avec l'appui financier du gouvernement du Canada.

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Let's protect farmland birds

... and their habitat !

Your property contains either pastures, open fields, fallow lands, hay fields or open lands. Did you know that those environments are favorable habitats for many bird species? Some of these are common meanwhile other have been recently labelled «at risk». It's the case for the grasshopper sparrow, the eastern meadowlark, the golden-winged warbler and the bobolink. All these species are likely to be seen in the region.

in the Vallée-du- Haut-Saint-Laurent



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Agricultural practices that take in consideration birds and their habitat will give a great hand to the species that are threatened by the destruction of their habitat (Bussi re, 2008). **Looking at the ecology of two species of birds, you will see in this leaflet how you can contribute to the protection of farmland birds that are using your property.**

DO YOU KNOW THE BOBOLINK ?

Bobolink's (*Dolichonyx oryzivorus*) presence in Vall e-du-Haut-Saint-Laurent isn't new. It's been around for a long time but nowadays its population has severely decreased. In 2010, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) recommended that this species be designated «threatened» following the Species At Risk Act (SARA). It got this legal status in November 2017. Furthermore, its nest and its eggs are protected following the Migratory

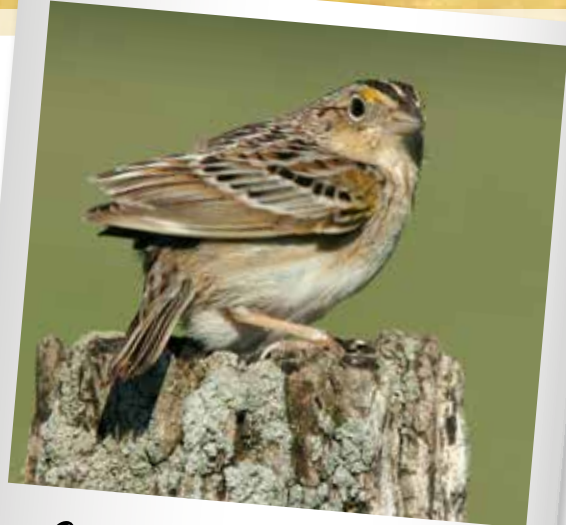
Birds Convention Act, 1994 (COSEWIC, 2010). At the provincial level, the species has no special protection status, but it benefits from a relative protection with the "Loi sur la conservation et la mise en valeur de la faune." Bobolink nests in different pastoral habitat such as fodder crop, wet meadow, herbaceous peat bog, abandoned field made mostly of high weeds, unplowed land and more rarely in small grain field. In maintaining or creating habitats for this species,

a variety of other bird species will benefit from it. The species is sensible to fragmentation of its habitat. For example, it does not like forest edges. Nests are made on the ground in a slight depression. Bobolink eats insects, plants and grains of dandelion, potentilla, yarrow and thistle. The presence of this bird is beneficial to the farm because it eats a wide variety of harmful insects, particularly during the raising of the chicks (COSEWIC, 2010).

WHAT IS THREATENING THE BOBOLINK ?

Many threats weigh on bobolink :

- **ACCIDENTAL MORTALITY LINKED TO MODERNIZED AGRICULTURAL TECHNIQUES OR MACHINERIES** (e.g. : early and more frequent hay harvest during reproductive season) (Lamoureux et Dion, 2014)
- **HABITAT LOSS** (e.g. : converting dairy farm in large crop culture)
- **HABITAT FRAGMENTATION** (small natural habitat too far away from each other)
- **NEST PREDATION BY VARIOUS TERRESTRIAL AND BIRD SPECIES**
- **PESTICIDES EXPOSITION**
- **OVERGRAZING AND DAMAGES CAUSED BY LIVESTOCK TRAMPLING**
- **CLIMATE CHANGE** (e.g. : variation in annual rainfall influences food availability)



Grasshopper sparrow

PICTURE: DOMINIC SHERONY (FLICKR)



Golden-winged warbler

PICTURE: MNR.GOV.ON.CA

GOLDEN-WINGED WARBLER'S HABITAT, A GOOD REFERENCE

In matter of protecting open areas for birds, the golden-winged warbler (*Vermivora chrysoptera*) habitat can be considered as a reference. This means that maintaining or creating an habitat for this species will help at the same time a wide array of other species. Golden-winged warbler loves a variety of half-opened habitats, covered of herbaceous plants and shrubs sometimes scattered with trees. Therefore, you can find its nests in abandoned agricultural fields that have been overrun by shrubs and trees or in old pastures overrun by shrubs. Those favourable habitats are progressively invaded by shrubs and trees. When the forest is taking over the shrubs, those habitats are not favourable anymore to the bird. If you want to protect this bird you have to protect its habitat. We can help you do that. If you contribute to the protection of this bird's habitat, many other species will follow.

There are many ways to protect and restore the bobolink habitat and the golden-winged warbler habitat. The next section outlines some recommendations on what you can do as a land owner to help those beautiful birds.

Your contribution is important for the protection of those birds! If you see them on your land or if you are interested in undertaking the bird attracting managements project please do not hesitate to contact us !

WHAT YOU CAN DO...

(Lamoureux and Dion, 2014; Lamoureux and Dion, 2016; Regroupement Qu becOiseaux, 2014)

FOR THE BOBOLINK

- If possible, maintain your field and meadow intact during many years. A minimum of 5 years is recommended since bobolink is very loyal to his chosen habitat.
- Delay the first hay harvest as late as possible (after July 15) in the mean to diminish the risks of knocking down the nests. It might be better not to harvest or to diminish the frequency of the hay harvesting during the reproductive season which spreads from mid-May to mid-July. If it's not possible to delay totally the hay harvesting, you may delay the harvest on some identified (nesting area) part of your field.
- Keep an intact parcel, where livestock will only have access after July 15th. If not, limit live-

stock density. For a continuous grazing, it is recommended to have less than 2.5 heads per hectare. For short term or rotation grazing, less than 4 heads per hectare is recommended. Consult the list of recommendations detailed by Dufresne and Lamoureux and by Lamoureux and Dion to improve your agricultural practices while minimizing risks of bird perturbation. (Dufresne and Lamoureux, 2009; Lamoureux and Dion, 2016)

- Avoid or diminish the use of pesticides and fertilizers. In the long run, they change the vegetal and the soil structure; they destroy the colonizing plants and create poor soil spots. Most of the time, colonizing plants and their seeds are an important source of food for the bobolink.

FOR THE GOLDEN-WINGED WARBLER

- If you let your field go wild, make sure to keep some young trees and shrubs for the birds to use as perch.
- Create new openings where the field is invaded by trees and create openings that allow weeds and shrubs to develop.
- If possible, do your work in your forest (wood harvest, thinning cuts, etc.) outside of the nesting period.

FOR BOTH

- If you know where the nests are, avoid those sectors during your farming activities to give a chance to the reproduction cycle.
- In pastures, when the nesting zone is known, block the access for the livestock during the reproduction period which spreads from mid-May to mid-July. Since those two species nest on the ground, grazing might be harmful for nests (Atlas des oiseaux nicheurs, ND).
- Try to avoid any disturbance, such as farming machinery or ATV passage during the reproduction period. Furthermore,

if you have a forested area, do your forest interventions (wood harvest, thinning cuts, etc.) outside of the nesting period.

- Don't let cats wandering outside during the nesting period of the two species.
- As much as possible, control the spreading of invading exotic plants such as buckthorn and common reed.

- Don't search for nests. By stamping plants and by leaving your smell walking on the field, you can increase the predation risks.



Bobolink (female)

PICTURE: CHEERSHOT (FLICKR)



Bobolink (male)