

WHIMBREL

(Numenius phaeopus)

Julie Guillemot (Université de Moncton Campus de Shippagan)
and Lisa Fauteux (Verts Rivages)



Amis du courlis
Whimbrel's friends

What do you know about this bird?

You may have seen them in flocks of dozens in your blueberry fields. It is, however, a shorebird.

This technical sheet was created based on scientific research and work done within the project "Whimbrel's friends", aiming for a better cohabitation between this bird and blueberry producers.

A protected species in decline

In North America, the Whimbrel population is declining (Smith and Watts, 2015; Smith et al., 2010). There were once hundreds of thousands of Whimbrels in Canada in the early 1900s (anecdotal information from hunters). Now, however, the North American population is estimated at 57,000, with approximately 3000 of these, staging in Atlantic Canada during fall migration.

This bird is protected by **The Migratory Birds Convention Act and by law**. It is thus illegal to hunt or scare this bird with a firearm and so no permit will be delivered to kill Whimbrel.

Aerial and ground surveys in the Acadian Peninsula suggest the Whimbrel population numbered 1,200 in 2014, 518 in 2015 and 344 in 2016 (Nagy-MacArthur and Guillemot, 2016).



By taking conservation action, it is still possible to improve the Whimbrel's situation. This is the aim of the "Whimbrel's friends" project. Within the framework of this project, scientist, blueberry producers and local community members are working together in order to maintain successful migratory stopover conditions in the Acadian Peninsula and the Maritimes.

JULY 2017

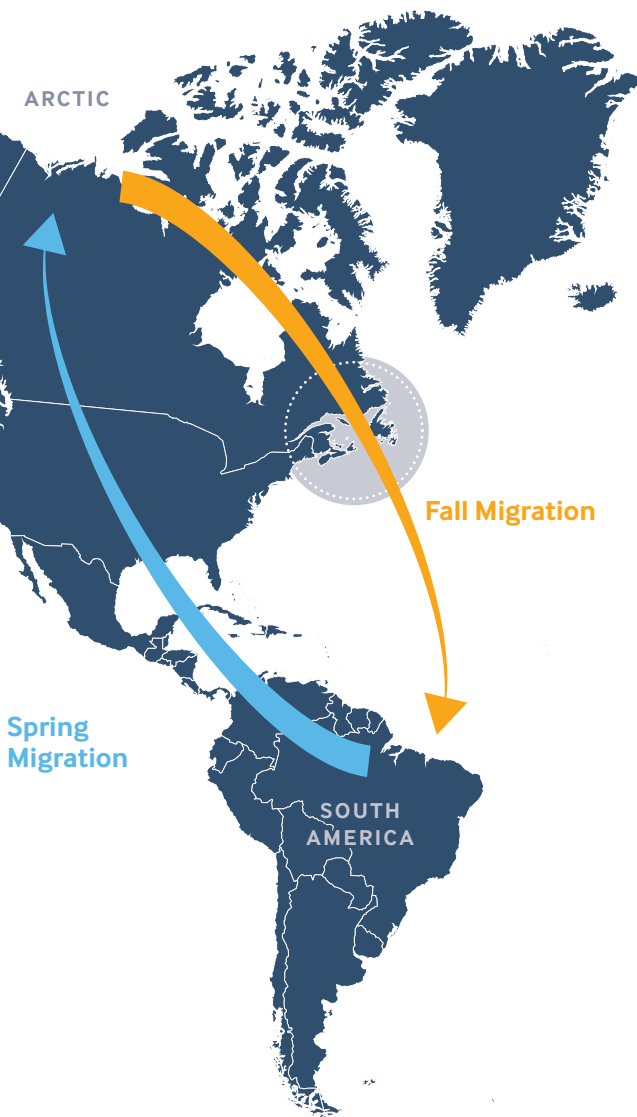
Julie Guillemot (UMCS) and Lisa Fauteux (Verts Rivages)



A migration champion

The Whimbrel nests and raises its chicks in the Canadian Arctic (Fig. 1); they then head south where they winter on the Brazilian coast. It is during this fall migration that they layover in the Atlantic region between mid-July to the end of August.

Fig 1: the migration of Whimbrel



THE MIGRATORY STOPOVER IS ESSENTIAL TO THE BIRD'S SURVIVAL

It enables Whimbrel to:

- recuperate after the significant effort involved in nesting;
- eat to gain enough weight and energy to be able to complete their migration.

During the stopover, approximately 20 days, Whimbrel must put on about 200 g in order to be able to fly 6,000 km non-stop over the Atlantic Ocean before reaching Brazil. This is considerable for a bird weighing from 310 to 490 g!

Why are Whimbrels using blueberry fields?

During the day, Whimbrels feed on blueberries and a variety of insects, but they also socialize and rest.



Traditionally, they would use bogs and peatlands, **but food in blueberry fields is far more abundant and diverse** (Smith, 2016). It is thus unlikely that Whimbrels will change their habits.

The combined results of blood samples (2), fecal samples and field observations have established that in addition to blueberries, Whimbrels eat a variety of terrestrial invertebrates, such as caterpillars, spiders, grasshoppers beetles and wasps (Nagy-MacArthur, 2016).



Amis du courlis
Whimbrel's friends

JULY 2017

Julie Guillemot (UMCS) and Lisa Fauteux (Verts Rivages)



How many blueberries are they eating?

Use this table to determine potential consumption in a field.

Number of Whimbrels	Daily consumption (pounds)	Seasonal consumption (pounds)
1	0.3-0.5	5-10
10	2.6-5	51-97
20	5-10	102-194
50	13-25	255-486
100	26-50	510-972
150	39-74	765-1458
200	52-99	1020-1944

Table 1 : Estimation of blueberry consumption based on field observations

Field observation gives a realistic bracket of estimated values of the quantity of blueberries being ingested by Whimbrels.

It has been calculated that one Whimbrel eats a maximum of 118 g to 225g per day, which adds up to a total of 5 to 10 pounds of blueberries per season (Nagy-MacArthur, 2016). The higher estimate assumes that a Whimbrel eats only blueberries (no insects) which we know is untrue.



What can you do?

1 RETHINK SCARE TACTICS

Many producers try to scare Whimbrels. However, field observation proves that efficiency varies with methods used. Propane-fired cannons have no impact on Whimbrels behavior in blueberry fields, whereas in the presence of alarm calls (emitted by loudspeakers), Whimbrels spend less time feeding and more time being vigilant, while staying on the field. They may be feeding as much, while staying longer.

So before purchasing deterrence devices, evaluate if actual blueberry consumptions justify such spending.



Amis du courlis
Whimbrel's friends

JULY 2017

Julie Guillemot (UMCS) and Lisa Fauteux (Verts Rivages)



2 BECOME A WHIMBREL'S FRIENDS

Some producers make the choice to tolerate the presence of Whimbrels. If they get adequate rest, Whimbrels have a better chance at successfully completing their migration. By doing so, you contribute to the protection of the species.

One of the goals of the project "Whimbrel's friends" is to recognize the role of producers who participate in the protection of biodiversity. Contact us to have your name added to the "Whimbrel's friends" registry.

3 COMPENSATION

The Whimbrel was added in April 2016 to the list of wildlife included in the provincial damage compensation program. For information, contact your local Agriculture, Aquaculture and Fisheries office.

4 CONTACT BIOLOGISTS OR LOCAL ENVIRONMENTAL GROUPS FROM YOUR REGION:

Each case may be different. If Whimbrels pose a threat to your production or if you need information, you can contact us.

For more information, please contact

VERTS RIVAGES

(Péninsule Acadienne)

Projet « Amis du Courlis »
Lisa Fauteux, biologiste
506-888-5271
vertsrivages@gmail.com

SERVICE CANADIEN DE LA FAUNE, ENVIRONNEMENT ET CHANGEMENT CLIMATIQUE CANADA

Julie Paquet, biologiste
506-364-5037
julie.paquet2@canada.ca
Sackville NB

*This project was undertaken with the financial support of:
Ce projet a été réalisé avec l'appui financier de :*



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada



UNIVERSITÉ DE MONCTON
CAMPUS DE SHIPPAGAN



Amis du courlis
Whimbrel's friends

JULY 2017

Julie Guillemot (UMCS) and Lisa Fauteux (Verts Rivages)



References

Nagy-MacArthur, A. (2016). Habitat use, diet, and behavior of migratory Whimbrel (*Numenius phaeopus hudsonicus*) in blueberry fields of Lameque Island, New-Brunswick. Honors Thesis, Department of Biology, Mount Allison University.

Nagy-MacArthur, A. and Guillemot J. (2016). Le courlis corlieu de la Péninsule acadienne : Résumé de recherche. Verts Rivages /UMCS. 2p.

Smith, F. (2016) Whimbrel conservation on Acadian Peninsula (the center for conservation biology)
<http://www.ccbirds.org/2016/10/03/whimbrel-conservation-on-the-acadian-peninsula/>

Smith, F. M. and Watts B. D. (2015). *Surveys and Habitat Use of the Whimbrel (Numenius phaeopus) During Fall Migration along the Acadian Peninsula of New Brunswick, Canada, 2014*. Center for Conservation Technical Report Series CCBTR-15-02. Williamsburg, VA: College of William and Mary/Virginia Commonwealth University.

Smith, F.M, Watts, B.D., and Duerr, A.E. (2010). *Stop-over and Migration Ecology of the Whimbrel: Fall 2009 Season Report*. Center for Conservation Biology Technical Report Series, CCBTR-10-01. Williamsburg, VA: College of William and Mary & Virginia Commonwealth University.



Amis du courlis
Whimbrel's friends

JULY 2017

Julie Guillemot (UMCS) and Lisa Fauteux (Verts Rivages)

