

# **BIODIVERSITY IN AGROECOSYSTEMS: IMPORTANCE OF NON-CROP HABITATS**

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Almost 50% of the St.Lawrence/Great-Lakes lowlands (total 14.1 km<sup>2</sup>) is devoted to agriculture. This is also the area where half the population of Canada lives. Consequently, the landscape is highly fragmented and non-crop habitats (woodlots, hedgerows, fencerows, small wetlands, old fields, etc.) have become increasingly rare and isolated. In addition, farming has intensified greatly during the last few decades, threatening further the quality of the remaining habitats interspersed among croplands. Yet little attention has been given to investigating the interface agriculture-urbanisation-wildlife and wildlife habitats in this region with a unique ecosystem, i.e., the mixed-wood forest. This paper will present first an overview of the landscape diversity and fragmentation, primarily of the St.Lawrence area, using satellite images and aerial photos. Second, the major changes in agriculture over several decades will be examined, from a dominance of dairy farming towards cash crop farming, and their impact in terms of the fragmentation process. We will also explore the most important causes related to agricultural activities that are responsible for the decline of non-crop habitats (quantity and quality), with particular emphasis on woodlots, hedgerows and wetlands. Finally, the importance of the different habitats as reservoir for plant species and other wildlife of conservation value will be demonstrated with several studies that were completed in the last decade in the study area. Some insight into conservation strategies that reconcile both the conservation of wildlife and its habitats with agronomic practices will be presented.