

## **Northern saw-whet owl and boreal owl: two new nesting species for Parc national d'Aiguebelle**

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The northern saw-whet owl is the smallest owl in eastern North America. It measures between 18 cm and 21.5 cm in length, and its weight varies between 54 g and 124 g, with the female being bigger and heavier than the male. Its cousin, the boreal owl, is slightly more robust. Mainly active at night, these two species are not well known and are hard to spot. In Québec, the Abitibi region and Parc national d'Aiguebelle are located roughly at the northern limit of the range of the northern saw-whet owl and at the southern limit of the range of the boreal owl.

To nest, both species use natural cavities in dead trees or take advantage of former cavities used by woodpeckers, mainly those of the pileated woodpecker and northern flicker. In the boreal forest, cavities big enough to accommodate a family of small owls are rare. This situation likely limits the size of the populations of these two owl species.

In order to learn more about these two species, studies were recently carried out at Université du Québec en Abitibi-Témiscamingue to specify, on the one hand, what their favourite habitats are and to evaluate, on the other hand, their susceptibility to the loss and fragmentation of mature forests.

Night-time surveys along roads revealed that the northern whet-owl is well established in the Abitibi region, and in particular in Parc national d'Aiguebelle where no fewer than eight different specimens were counted in 2005 at ten survey stations. A network of 300 artificial nesting-boxes was set up in the region in order to monitor small owl populations over the long term. This network should make it possible to determine the extent to which local habitat conditions influence the selection of nesting-boxes and the productivity of the pairs that use them. In the fall of 2005, 20 nesting-boxes were laid out in Parc national d'Aiguebelle. Not having undergone extensive alteration associated with human activities (logging or agriculture), these sites are important and represent good "benchmark sites" within the context of the study.

The first year of monitoring of the nesting-boxes, in 2006, was very profitable for the Aiguebelle sites: the two species were added to the list of the park's nesting species! A pair of northern whet-owls gave birth to four young; a pair of boreal owls were the proud parents of three fledglings. All of these specimens, including the adults, were banded, which will allow researchers to determine if these same individuals use the park's nesting-boxes again in the future.

