Bats kicking out House-Wren-ters?

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At the beginning of the 2013 field season, the staff, a few interns and I reestablished a historic House Wren grid located to the west of the Observatory. This grid was composed of 25 man-made nest boxes measuring 6"x 5" x 12" with a ¾ inch circular opening.

In the first year since it's reestablishment, the grid was quite successful with 7 House Wrens moving in and successfully fledging 86 chicks. This year, the occupancy declined slightly to 5 nets resulting in 69 successfully fledged chicks.

In addition to this grid being occupied by House Wrens, this summer we were surprised to find that some Little Brown Bats had moved in as well! By the end of July, three Little Brown Bats had moved into various homes across the grid!

Little Brown Bats are one of the most common species of bats in Alberta, and are relatively small in size. They weigh between 7 and 9 grams and have a wingspan between 25 and 27 cm. The Little Brown Bat is very well known for its pest control services. It's estimated that bats provide pest control services to the tune of \$22.9 billion dollars per year. Unfortunately, Little Brown Bats have been dying in catastrophic numbers.

Millions of bats have been dying and although in 2006 they were listed as 'America's most common wild mammal species' they are now listed as a 'threatened species' in many states in the US. Thankfully, in Alberta, the Little Brown Bat is still quite prolific; it is the most common bat in Alberta. The provincial population is estimated at 1 to 1.5 million individuals, and they are classified as 'Secure' in the current *General Status of Alberta Wild Species* report.

This year was the first year that Little Brown Bats have been recorded as utilizing nest boxes on site. As the House Wren occupancy in the grid this year declined in comparison to last year, initially we were wondering whether Little Brown Bats were displacing House Wrens. By looking at the nest box records, however, it was determined that the bats had moved in after the House Wrens had moved out or that they moved into unoccupied boxes.

One of the bats moved into a previously active nest box, and the other two moved into boxes that hadn't been occupied that year. The bat that moved into the previously active nest only did after all the chicks had fledged. Since then they have consistently been observed in their new abode! Thankfully, the various nest box tenants manage to coexist peacefully!