

SASKATCHEWAN'S FIRST LARGE PURPLE MARTIN ROOST



Purple Martins settling into roost trees on Last Mountain Lake. Photo credit: Dale Hjertaas

Dale G. Hjertaas
15 Olson Place
Regina, SK S4S 2J6
hjertaas@sasktel.net

Pre-migratory roosting by Purple Martins (*Progne subis*) is an activity well known in eastern North America, but not previously reported in Saskatchewan. Martins of all ages assemble in roosts. They generally disperse from the roosts before dawn and forage over substantial areas before returning one to two hours before sunset. Roosts are usually situated in stands of trees or underneath concrete bridges,¹ and are often associated with water bodies and may be located in over water situations such as reed beds.²

On August 13, 2015, Paule Hjertaas and I travelled to Buena Vista on Last Mountain Lake to view the first reported Purple Martin roost in Saskatchewan. We were taken to the roost site by David and Karen Blais who had located and found the roost.

Just before sunset, about 20:15 h, a huge flock of Purple Martins came in over the lake. They flew around a bit then went to land in a small patch of trees just back from the shoreline. They settled in the trees, then flew out and circled around again before settling back into the trees. They repeated this action several times as though not quite ready to settle for the night. Thousands of Purple Martins flying just in front of you as you gaze into the sunset is an amazing experience.

Once they had settled, and it was quite dark, we went under the roost and could see Purple Martins perched on Caragana and Green Ash branches. The important thing for them seemed to be to find a fairly horizontal branch and there was some last minute adjusting to get better branches. I watched branches tip under the weight of too many birds until a couple closer to the end of the branch would fly up to find a new branch. That lightened the load

and let the branch straighten a bit for the rest. There was lots of noise as the birds adjusted their positions and vocalized.

It is hard to count thousands of swallows as they flew by. There were too many small birds moving too quickly for me to use the 50, 100, 200, 300 approach I would use to count large flocks of geese or ducks. To get a count, I took photos of the flock as it flew by. The flock was too large for one photo, so I took a quick series of four, trying to get the whole flock without overlap. I then counted the birds in my photos — or, more accurately, the spots in the photo — assuming each spot in the sky was a Purple Martin. The final count over the four photos was 5,806. There are many potential errors with this count — I took the photos as the flock made one of its take offs from the trees, so part of the flock may have remained roosting in the trees. I may have missed part of the flock in my photos and I may have some overlap

and duplicate counting. Nonetheless, it was much more accurate than a guess as they flew by and I think is a fair estimate of the number flying over at that moment. I have no way of knowing if there were further Martins that had remained in the trees, so this is probably a low estimate.

David and Karen Blais visited the site over the next several days. By August 19, David advised me that the roost seemed even larger than when I had visited and the birds seemed very restless with a lot of flying before settling. On August 22, David reported the roost was still sizeable, but for the first time they noticed it was smaller. By the evening of August 24, the roost was so much smaller that David and Karen could not hear the birds squawking in their roost.

David Blais visited the roost twice in the early morning to see the Martins' morning departure. On the morning of August 18, at 05:30 h, David found only a few stragglers left — most of the birds had already departed for the day. On August 21, David arrived at the roost at 05:10 h. The weather was overcast with a small shower. The roost lifted off in mass at 05:37 h, possibly slightly later than on the 18th because of the overcast and rain.

Why is this the first time that any roost has been reported in Saskatchewan? The Purple Martin is an eastern species with Saskatchewan and Alberta being at the northwestern end of the range, except for a separate Pacific coastal population. The Purple Martin Conservation Association keeps a registry of roosts. There is one reported from Manitoba and a few from eastern Canada, but most are spread across the eastern United States. (<https://www.purplemartin.org/research/19/project-martinroost/>).

The pre-migratory roosts provide safety overnight from predators in an area where the Martins can forage to put on body fat in preparation for

fall migration.² Large pre-migratory roosts are therefore more likely to be found in areas with greater numbers of breeding Martins. Purple Martin numbers have been increasing in Saskatchewan, probably in response to availability of nest sites. The Saskatchewan Breeding Bird Survey showed an annual increase in Purple Martin numbers of 4.8 per cent per annum between 1973 and 2009.³ So, this roost may be a reflection of a growing Martin population.

For those interested in a better visual impression of these Martins at the roost site, Paule Hjertaas has posted videos on YouTube of the Martins flying: www.youtube.com/watch?v=k_Jpd3L7Lr0 and at the roost <https://www.youtube.com/watch?v=VFeiPfhOSfo>.

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1 Tarof, Scott and Charles R. Brown. 2013. Purple Martin (*Progne subis*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bnaproxy.birds.cornell.edu/bna/species/287>

2 Ray, James D 2014 Purple Dusk: Protecting Pre-Migratory Roosts Is A Key for Conservation of Purple Martins. Purple Martin Update 23(1):1517.

3. Portman, Tina. Purple Martin in Houston, C. Stuart, Alan R. Smith and J. Frank Roy (In Prep) Birds of Saskatchewan. To be published by Nature Saskatchewan. 🐦



Purple Martins flying up from roost site before returning to settle. Photo credit: Dale Hjertaas