MANITOBA CHIMNEY SWIFT INITIATIVE (MCSI) - ST. ADOLPHE 2012 SUMMARY

The monitoring of nest sites in 2012 was the sixth consecutive season of collecting information about the breeding behaviour of chimney swifts in St. Adolphe. We thank the avian landlords, community residents, RM of Ritchot, and MCSI monitors for their continued assistance and support throughout the season: S. and A. Leclerc; J. Brodeur, President, and members of Le Club Amical; A. Biggar, President/CEO, and C. Huyghebaert, General Manager, of Big Country RV; Fr. La Fleur, Fr. Chartier and parishioners of the St. Adolphe Parish Church; L. Verhaeghe; A. Lagasse; H. Brodeur; B. Stefaniuk; F. May; L. Cocks; F. Machovec; J. Machovec; and R. Stewart.

Public awareness of this Threatened species (listed on Schedule 1 of the Federal Species At Risk Act) has been growing as we learn about the biology of chimney swifts nesting at the northern periphery of their range. The first chimney swifts arrived in St. Adolphe on May 10. After an early and warm start to the spring, no advantages to the swifts' schedules were had as cooler, wet weather set in during the last half of May. Nest building and incubation activities were typical through June. As in 2011, extreme heat, strong winds, low rainfall, and low mosquito trap counts characterized July. These factors appeared to negatively impact nesting success and extremely high rates of nest failure occurred again in 2012.

The overall nesting success was 20% (1 of 5 nesting attempts) for 2012 (Table 1). Four juveniles fledged from the Main St. chimney, the first of which was seen on Aug. 5. As this is the first record of nesting success for Main St. we are encouraged that the previous refurbishment of the chimney was beneficial to the chimney swifts! More details of the monitoring season follow.

SUMMARY OF THE 2012 MONITORING SEASON.

St. Adolphe may be regarded as the "chimney swift nesting capital of Manitoba" as the highest known concentration of active nest sites occurs in this town. For the fourth year in a row, breeding pairs of adults occupied all 5 known nest sites. These sites include the Southeast (SE) and Northeast (NE) chimneys on Le Club Amical, and the chimneys in the former Brodeur Bros. dealership (closed Dec. 2009) which is currently occupied by Big Country RV, the Paroisse St. Adolphe Catholic Church, and a private Main St. residence.

Monitoring observations made during the day or at the roosting hour followed the same protocol. During continuous viewing of the chimney top, the time of an entry or exit event was recorded. Two intervals can then be calculated: a) the between-visit interval (exit to entry) and b) the duration in the chimney (entry to exit), which is also known as the turnaround time. Additional observations made included: direction of flight toward/away from the chimney; the characteristics of entry: speed, orientation, number of attempts required to enter; whether the chimney swifts were vocal or quiet; and the

group size of approaching or departing chimney swifts. Trailing wing edges were observed on some occasions and notches/discontinuities indicated moulting in adults. Juvenile swifts had wing edges that were complete/continuous. All of this information is used to determine the stages of nesting, evaluate nesting success, and track the local population of chimney swifts in St. Adolphe.

Cleanout traps in the Brodeur Bros. and the Main St. chimneys can be checked to verify nesting attempts; all other chimney cleanout traps are inaccessible. NOTE: On April 26, 2012 the Main St. cleanout trap contained 1 nest + 1 egg which had dropped down from the chimney wall over the winter. Adjust the clutch size for Main St. 2011 to = 5.

In 2012, 102 hours of observations were made at the 5 nest chimneys (Table 1). Observations were primarily multi-site daytime monitoring events. This provides the best opportunity for comparing the stage of nesting between sites and for understanding the dynamics or interaction of the birds within the community. Observations spanned all phases of the chimney swifts' time spent in St. Adolphe: arrival; nest building; incubation of eggs (18-21 days); feeding and brooding juveniles from hatching to 6-7 days of age; feeding non-brooded juveniles aged 6-7 to 28-30 days old; fledging of juveniles from the chimney; pre-migratory grouping; end of season southern migration. Nesting time-line information is based on studies in Texas (Kyle, G. Z., and P. D. Kyle. 2005. Chimney Swifts. America's Mysterious Birds Above the Fireplace. Texas A & M University, College Station. ISBN 1-58544-371-9) and Manitoba (Stewart, B. E., and R. E. A. Stewart. 2010. Nest site use and breeding success of chimney swifts in St. Adolphe, MB, 2007-2009. Blue Jay 68(3): 124-132.)

The Chimney Swifts were first seen around the Church on Thursday, May 10. By the end of May, pairs of breeding chimney swifts were nest building in each of the five nest sites (Table 1).

Nest failures began at the incubation phase, first at Brodeur Bros./Big Country RV between June 28 - July 3. Then the nest site at SE Club Amical was abandoned between July 12-13.

Unfortunately, abandonment of nest sites where young were being fed occurred in July. Less than week old juveniles were abandoned at the Church between July 9 -10 and then approximately two week old juveniles were abandoned at the NE Club Amical site on July 31.

The one successful nesting attempt was at the Main St. site. On Sunday, Aug. 5 a fledgling was sighted making a fluttery entry into the chimney; a total of four juveniles from the clutch fledged (Table 1). This momentous event was the first recorded nesting success for the site. The refurbishment done to the chimney in May 2010, as part of the MCSI habitat restoration program, has been a success!

Roosting of adult chimney swifts continued at nest sites that were unsuccessful until shortly after the fledging at the Main St. chimney. Then withdrawal/dispersal from the unsuccessful nest sites started. The NE Club Amical chimney was empty between Aug. 2-5, the Church between Aug. 6-12, the Brodeur Bros./Big Country RV between Aug. 13-16, and the SE Club Amical chimney between Aug. 13-18. The Main St. chimney was the last site used between Aug. 16-19.

Generally, the withdrawal of chimney swifts from the community was early compared to previous years, likely driven by poor food supplies. No congregations of local and migrants occurred at the Church as was seen in 2008-2010; this situation was similar to 2007 and 2011 when there was not a successful nesting attempt. Indeed, no local aggregations for roosting occurred in 2012.

COMMUNITY NEWS

MCSI sponsored a swift night out at the Church grounds on Monday, June 4. We thank our coordinator, Frank Machovec, for hosting the event that drew nearly 20 enthusiastic bird watchers out for an evening of fellowship and remarkable chimney swift viewing. Leon Verhaeghe kindly opened the Church facilities for the group.

Frank attended St. Adolphe's second annual community festival "Mudfest". Many interested people showed up at the MCSI booth to see a chimney swift nest and talk about the bird's presence in the community.

Frank maintains the MCSI website: www.mbchimneyswift.ca Check the site for general links e.g., MCSI brochure, monitoring guides and for specific St. Adolphe information e.g., nesting data contained in the yearly report. Frank's blogspot which tracks developments over the monitoring season is at: http://swift-notes.blogspot.ca/

Fr. Chartier was welcomed to the parish in early August as Fr. La Fleur moved to a new congregation. Fr. Michaud, who was with the St. Adolphe parish during the 2007-2010 monitoring seasons, has been providing his services in Lorette. This summer we found that Fr. Michaud's "new" church chimney was a nesting site for chimney swifts!

In May 2013, we will have our eyes to the sky to welcome pairs of chimney swifts back to each nest site. Hopefully, a more benevolent weather pattern and more plentiful mosquito population (sorry folks) will be with us.

TABLE 1. SUMMARY OF CHIMNEY SWIFT USE OF 5 NEST SITES IN ST. ADOLPHE, MB, 2012. THE INFORMATION IS BASED ON 102 HOURS OF OBSERVATION.

CHIMNEY	FIRST DATE USED	LAST DATE USED	OUTCOME OF NESTING ATTEMPT	MAX. NO. OF SWIFTS	NO. DAY OBS. MADE	NO. ROOST OBS. MADE
SE CLUB AMICAL	May 16; pair nest building by May 31	Roost Aug. 13-18	Nest site abandoned at incubation stage, July 12-13	2	31	7
NE CLUB AMICAL	May 12; no delay in pair starting nest building	Roost Aug. 2-5	Nest site abandoned July 31; Day 17 of feeding juveniles	2	31	7
BRODEUR BROS.	May 16; pair nest building May 24-31	Roost Aug. 13-16	Nest site abandoned at incubation stage, June 28 - July 3	2	19	12
CHURCH	May 17-18; no delay in pair starting nest building	Roost Aug. 6-12	Nest site abandoned July 9-10; feeding brooded juveniles less than a week old	2	26	10
MAIN ST	May 10-16	Roost Aug. 16-19	Fledging began on Aug. 5; four juveniles survived out of a clutch of five	7	32	9

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