Chaetura

Spring 2016 | Chimney Swift Conservation Association | Volume 20

Sanatorium Historique Lac-Édouard
is a non-profit organisation
with the mission to
protect, promote and sustainably develop
Lac-Édouard's
cultural, natural and agricultural heritage,
and
to protect the habitat of Chimney Swifts.

Located at 1200 feet of altitude at the 47th parallel, the old historical roost of Lac-Édouard sanatorium in Haute Mauricie is at the edges of Chimney Swift's northern boundary in Québec. In 2015, Sanatorium Historique Lac-Édouard worked in collaboration with Canadian Wildlife Service stewardship program, Fondation de la Faune du Québec and Regroupement QuébecOiseaux to restore a 130-foot-high industrial chimney that hosts up to 180 Chimney Swifts on a total population in Quebec estimated around 2000-2500 individuals.

There is a swift pair nesting at the bottom of this roost at about 10 feet from the ground each summer and three new fledglings were born in 2015. This historical roost is considered among the most important within the province because of its location at high latitude and its particular forest and lake environment.

My father, Réjean Parent, a very talented wild duck and bird wood carver, has built our first artificial nest tower in 2014 using Paul and Georgean Kyle's plans.

It was first temporarily installed and we were planning to move it on a concrete base on another location.

When we were about to move it in August 2015, we realized it was hosting a nest with 5 eggs - of which 4 fledgling emerged! This nest succeeded without any heating, making us feel that there is a great potential for the use of artificial nesting structures on this site. We have finally built the concrete base for the chimney left on the same spot and we have kept its aluminum insulation sheet covering, just to make sure not to modify any critical parameter that led to success. As you know, a swift pair will come back to the same nest site year after year and their descendants will follow them and nest close-by. We had this hopeful perspective in mind when the whole family left together for their winter ground on a windy morning of September…

By that time, we had already installed two new structures. The first one is a heated structure developed by Centre de Recherche Industrielle du Québec (CRIQ) that was offered to us by Canadian Wildlife Service, thanks to François Shaffer for his invaluable support. The second one was built using Paul and Georgean's plans and it was covered with recycled bricks from the old sanatorium, as a memorial to all those who recovered or died here a century ago. We named this chimney "Beatrice and Armand" after my grandparents who met at the sanatorium in the 20's and who spent their whole life together. Our goal would be to name many new chimneys in the coming years after ancestors from the village…

We conducted an inventory of the brick chimneys in the surroundings, which are not very abundant in this village of 164 inhabitants living on a territory of 1000 km^2. However, with the presence of a 70 km^2 ecological reserve close-by named Judith-de-Brésoles, large hollow trees are common, mostly among birch and maple forest. Jean-Marc Fournier, a dedicated volunteer, spent an whole summer compiling a GPS inventory of the natural potential nesting sites for Chimney Swift in the area, which will be very useful as a basis for further observations and

investigations. The Chimney Swift colony of Lac-Édouard is particularly interesting to study because there is probably a lot of nesting in hollow trees within this group which lives in a forest environment. This could be a living example of a long-term solution to Swift population decline in northern areas.

To support its tourist activity, Sanatorium Historique Lac-Édouard has developed in collaboration with Fondation de la Faune du Québec an interpretation center dedicated to Chimney Swifts habitat that will be open to the public in July 2016. Under the direction of renown contemporary artist Karen Lacroix, different form of visual arts will be used in an immersive presentation to make visitors aware of swift's habitat fragility and of what they can do to support this endangered species.

By humanizing the Swifts using artistic projection and excerpt from Paul and Georgean's publication, we will help visitors to understand that we, human, were the first responsible for the species decline in the past, but that we also hold the keys to insure its protection in the future.

In the coming years, Sanatorium Historique Lac-Édouard wishes to establish a northern Swift Sanctuary to help support swift's habitat in a large radius around the historical roost, both by incentive and regulatory means. A biodiversity pond will be fit out at the bottom of the structure and interpretation activities will be held in the area to educate visitors and promote good practices for swift's long term protection.

We wish to gratefully thank Paul and Georgean Kyle for their personal efforts and involvement in Chimney Swifts protection. You were the first inspiration to all our work in Lac-Édouard.

Simon Parent,
Sanatorium Historique Lac-Édouard

The Detroit Miracle

It's hard not to notice that big old brick industrial smokestack off to the north as you drive into Detroit on Route 5.

Chimney Swifts have also noticed the Farmington Junction property and made it their migratory home. There's a lot of Chimney Swifts here, perhaps the largest concentration in North America.

Property owners Michelle Romans and David White, not only didn't consider the birds pests, but had become quite fond of and wanted a way to share them with the world. They contacted the Coordinator of Audubon Vaux's Happening who had been live streaming Vaux's Swift action from a communal migratory roost site in Monroe, WA since 2011 to see if he could help with that.

It was hard to find anyone in Michigan with security camera experience that was interested in doing a job this far off the ground and they all insisted on renting a big bucks high reach crane. Fortunately, 120 years ago when the bricks were put together for this structure they put in a rebar staple every 18 inches all the way to the top. I sent off a "Who wants to be part of an urban severe exposure adventure?" to the Detroit Climbing Club. We got a couple responses but no commitments.

Leora Schwitters

But our project did get the backing of Detroit Audubon and ground support from High-Tech Security Systems. Good enough. We flew into Detroit the first week of May with our homemade adjustable aluminum angle camera mount, three ascenders, an assortment of fasteners, and 200 feet of lime green climbing rope in our checked luggage. It would take at least two trips up this brick beast. The first to attach our top rope and scope things out, the second to push the big Vivotek IP camera, trailing it's cable connection, up the rope to the opening.

It was raining the first trip and I had a couple thousand afternoon shelter seeking sooty brown birds checking me out on the way up. It was easy to maintain ones focus, but the rebar staples kept getting smaller in diameter and looser the farther up you went. I'll swear that top one had weathered down to only ¼ inch.

Looking down after camera installation

In the end there was no thud and no blood. Local stories of the adventure can be found here:

http://www.hometownlife.com/story/news/local/farmington/2015/05/08/farmngton-swift-roost-birds/26984199/

and here. http://www.farmingtonvoice.com/chimney-swift-cam-will-track-farmingtons-record-roost-180123

The camera had been live streaming through WildEarth in South Africa continually since last summer at http://www.wildearth.tv/cam/detroit-chimney-swifts

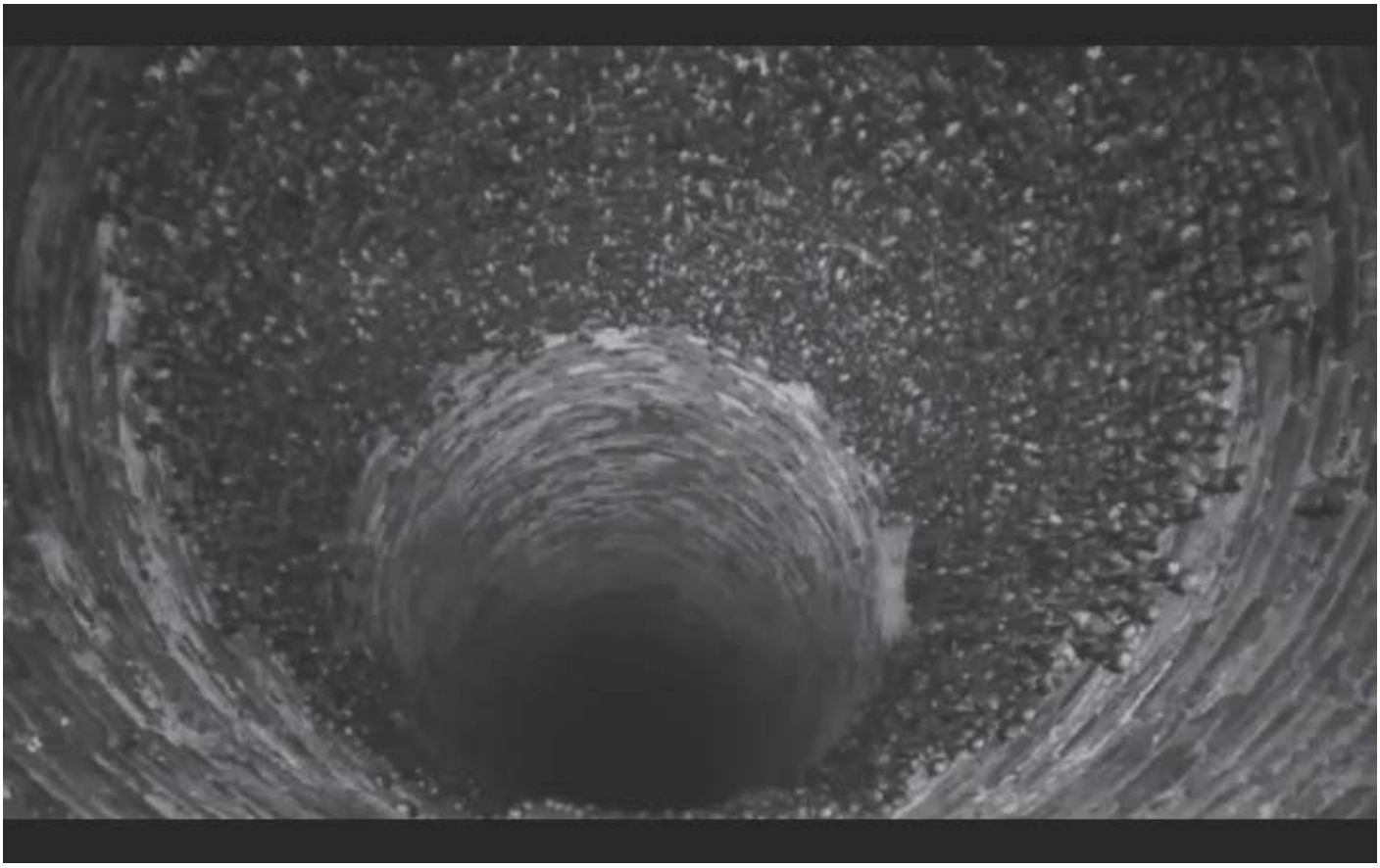
The camera is a top of the line HD with infra-red. Wintertime viewing shows a big dark hole in the middle of a lot of old but pretty bricks. In the fall we got to see lots and lots of swifts. How many? Hard to count, but if you put a grid over a screen shot and tally up how many birds are in each square you do get more of a count than a guess. Here's the bottom line.

67 observations from 8/18/15 to 10/18/15 totaled 378,982 Chimney Swifts. Average swifts per night was 5656 with a one night high of 17,000.

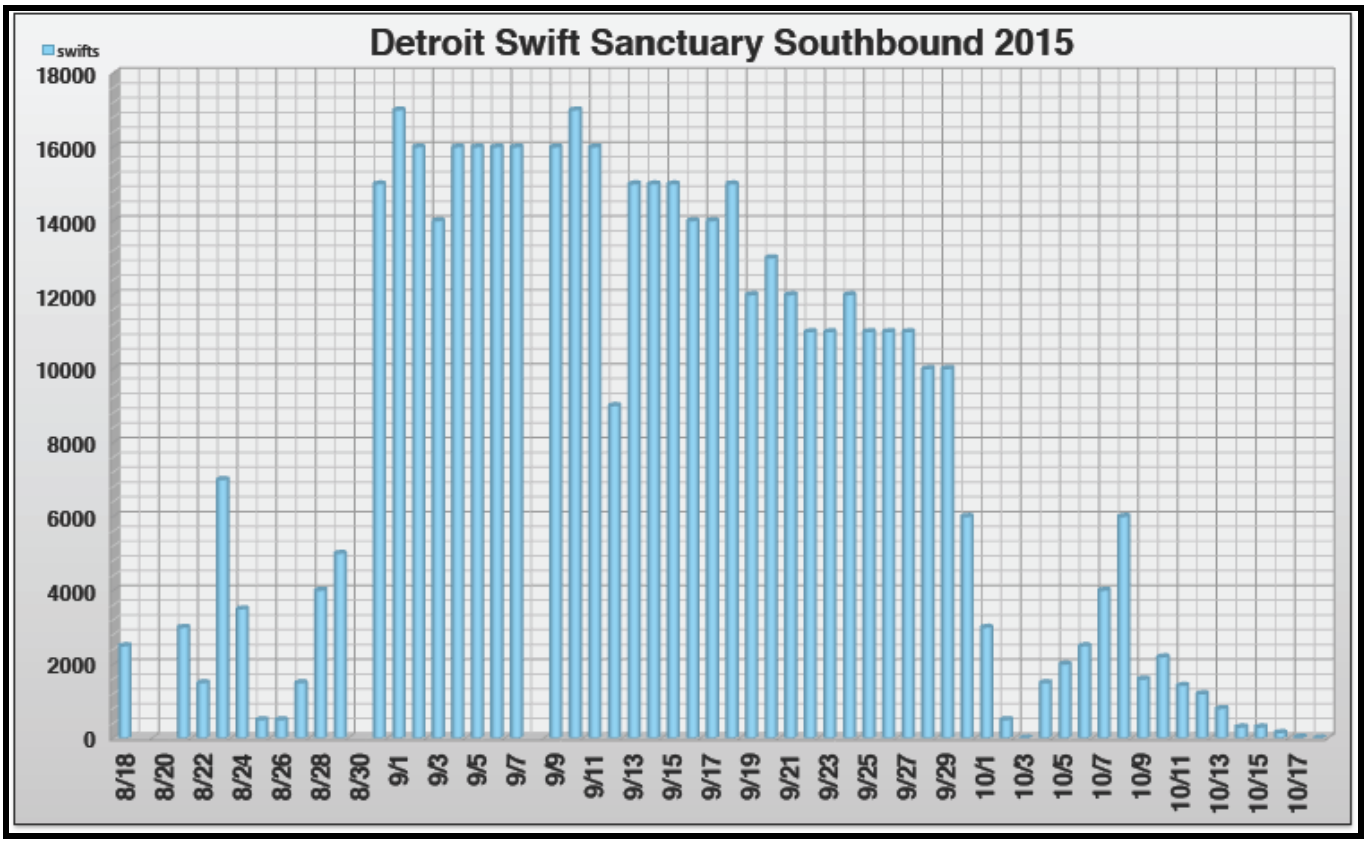
The owners had a couple of outside counts the previous September that were close to 50,000. Looking at their videos, I don't doubt it.

There has probably never been a Chimney Swift major roost site monitoring from inside the bricks during their northbound migration. Fingers crossed for no lightening strikes on that big smokestack in the meantime. Make that ever...

Larry Schwitters
Project Coordinator
Audubon Vaux's Happening



Showtime in Detroit!



Chimney Swift Conservation Forum

On August 21st, the North Carolina Museum of Natural Sciences and Wake Audubon hosted a meeting to discuss the issues facing the future of conservation of Chimney Swifts in North America. Presenters and topics included John Connors (Chimney Swifts and People), Rua Mordecai (Nesting Studies), Georgean and Paul Kyle (Designing and Building Nesting Structures), Charlie Collins (Foraging Behavior of Swifts), Larry Schwitters (West Coast Vaux's Swift roosts), and John Gerwin (Chimney Swift Roost Tower at Prairie Ridge). Introductions were by Rick LaRose of Wake Audubon.

The final presentation was by Dennis Evangelist (Flight patterns of Chimney Swifts) which included some remarkable 3D videos of Chimney Swift roosts in downtown Raleigh, NC. Here is a link to his lab where the work is done and some of their videos. 3D glasses really enhance the experience! https://vimeo.com/channels/859281/116118268

Dennis Evangelist, John Gerwin, Georgean Kyle, Paul Kyle, Charlie Collins, John Connors, Larry Schwitters and Rick LaRose

Participants enjoying Dennis Evangelist's 3D swift video

The following day, a workshop funded by the Toyota Together Green program was held at the museum to discuss strategies for Chimney Swift conservation. The workshop was led by Curtis Smalling, Director of Land Bird Conservation, Audubon North Carolina, and was attended by all of the previous evening's presenters plus Brian Sheema (Operations Director, Audubon Society of Western Pennsylvania), Rich Merritt (Operations Director, Audubon Society of New York), Kim Brand (Bird-Friendly Communities Coordinator for Audubon North Carolina), Lena Gallitano (President, Wake Audubon) and other interested parties. Topics discussed included working with local chimney cleaning companies to use removable chimney caps (in place during the winter months and removed during the nesting season) and enlist their help with conservation issues; public education; Chimney Swift tower construction and enlisting Eagle Scouts; data collection and creation of a phone app; and conserving existing roost sites.

On Sunday, Wake Audubon hosted a ***Chimney Swift Family Festival*** to celebrate completion of the large brick Chimney Swift roosting tower at Prairie Ridge. The family event included hiking, food trucks, live music and many children's activities. There were also booths offering books, artwork, bird feeders, bird houses, information and other wildlife related wares. The Chimney Swift Tower was opened so everyone could see the first successful nest in the structure.

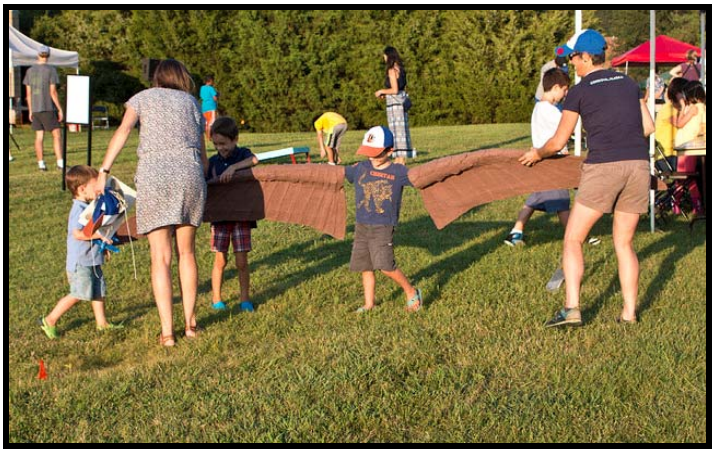
The culmination of the day was when John Connors (retired past director of the NC Museum of Natural Sciences) donned a Chimney Swift mask and declared "It is time to flock up!" He then led an enthusiastic group of masked children (and adults!) in sweeping circles around the tower. Shortly thereafter, the true residents of the tower returned to roost. This first year it was just the parents and their offspring. However, every roost starts with a single pair, and that has now occurred!

Georgean and Paul Kyle

Entrance to the ***Chimney Swift Family Festival*** *at Prairie Ridge*

Chimney Swift supporter in a stylish mask

Live music: Bird Songs!



Future conservationist trying on some swift wings

The Tower at Prairie Ridge

The tower was financed in part by the sale of personalized sponsor bricks installed at the tower site

Our sincere thanks to Robert Oberfelder for taking all these great photos and granting us permission to use them. To see more, including a video of the "Flock Up", visit the Wake Audubon Flickr web site: https://www.flickr.com/groups/2269654@N21/pool/page2

100 Towers for Pennsylvania County Parks

Brian Shema is Operations Director for Audubon Society of Western Pennsylvania. Although we have been corresponding with Brian for many years about Chimney Swifts and Chimney Swift towers, we met him in person for the first time in Raleigh, NC last summer at the Chimney Swift Conservation Forum. At the conference we learned of his ambitious goal of constructing 100 Chimney Swift towers in celebration of the Audubon Society of Western Pennsylvania's Centennial Celebration.

The Audubon Society of Western Pennsylvania and Allegheny County Parks Foundation worked together to raise funds for the towers which will be erected in county parks surrounding Pittsburgh. To date they have raised $198,000 from a group of contributors including the Allegheny County Parks Foundation, the Pittsburgh Foundation, and private donations.

Brian has contracted with a team of local contractors to build the towers, and volunteer work days will be planned to enlist the help of Audubon's members and friends in the area. The project also includes development of an app so area birders may contribute information about the success of the towers throughout the nesting and migration seasons. When we alerted him on March 19th that the first swifts had arrived at Chaetura Canyon, he responded: "Slow them down! We've just signed the contract for 100 swift towers in 9 of our county parks. We need time to build them still…"

Congratulations to Brian and all the participants in the project. We hope this becomes a model for other parts of the country.

Georgean and Paul Kyle

One of Brian Sheema's towers in Pittsburgh, PA
Photo courtesy of Brian Sheema

Here and there 1.1

Photo by Ronald K. Jeppe

Hernando, MS

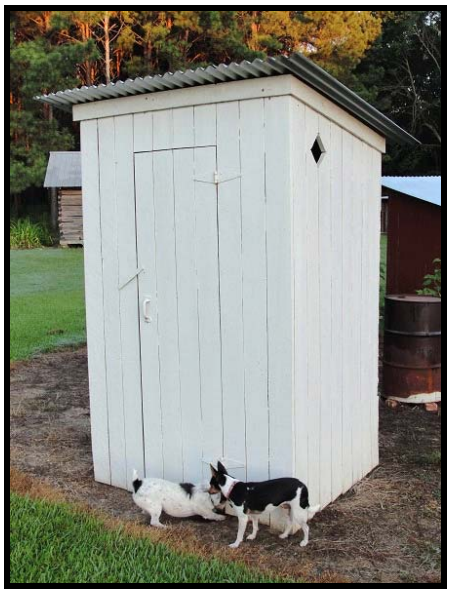
We recently registered my son's Chimney Swift Tower, Eagle Service Project, here in Hernando, MS.

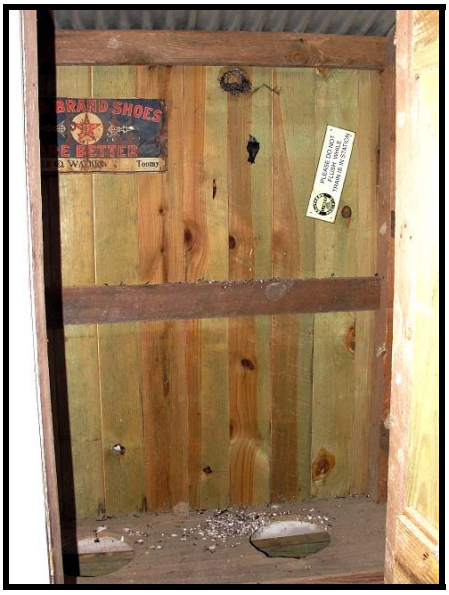
GPS Coordinates: 34°49’35.80″ N 90° 06’46.89″ W

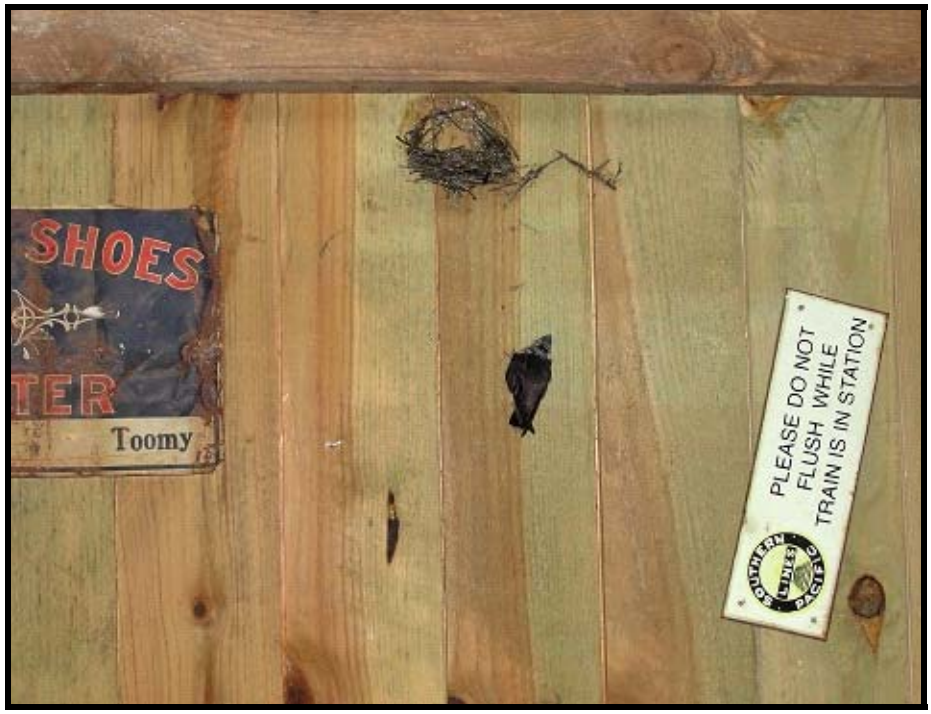
Photo by Zack Malenfant

Travis County, TX

This stone Chimney Swift tower is located on Reimer’s Ranch County Park.







Chimney Swifts Appropriately Pooping
Photos by Greg Grant

Nacogdoches, TX

Heard clatter from my outhouse this morning and opened to see a baby Chimney Swift out of the nest. Mother wasn't happy with me. It looks like an outhouse but it's actually a big bird house... Sorry about the "crappy" phone pics.

Here and there 1.2

Photo courtesy of Deanna Krambeer

National, Iowa

I'm sending a photo of two of the five swifts that fledged from the tower at National. This is the second consecutive year that the parents raised five young, bringing the total raised by the swifts in the tower to 17. They were delightful to watch, up close when they were very young and through the monitor as they were older. They crowded the nest to a degree that seemed impossible to maintain before several of them moved to the wall beside the nest. By the early part of August the chimney was empty during the day, but we believe they roosted there at night. I'm always impressed with the outstanding beauty of this bird, and the interest they exhibit by watching me as I watch them.

We are very grateful for the camera that Bob Anderson donated to our project. This allows us to see inside the chimney without entering the tower and disturbing the birds. He died unexpectedly earlier this summer. He left a wonderful legacy of conservation and pure enjoyment of birds.

Deanna Krambeer
Friends of Sherman Tower

Photo by Gary Flemming

Austin, TX

I have just finished building habitat using instructions from your book.

Gary Flemmons

Stonewall, TX

This tower was constructed on rural property as part of a Conservation Exemption Plan. The landowners received their exemption and four fledgling swifts join the population!

Nona and Andy Sansom

Tower of Joy
Photo by Paul Kyle

Blanco County, TX

Stonedance Tower

9 eggs, 6 hatched, 6 fledged

3 eggs were still in the nest with a single hole in them. Suspect the Canyon Wren

Weirwood Tower

5 eggs, 4 hatched, 4 fledged
unhatched egg had a hole in it, suspect the Canyon Wren

Dragonstone Castle
7 eggs, 6 hatched, 6 fledged

unhatched egg had a hole in it, suspect the Canyon Wren

Tower of Joy
9 eggs, 9 hatched, 9 fledged

Total- 30 eggs, 25 hatched & fledged! I think that is a new record.

Lydia Middendorf

A Swift's Return - 2015

Kane County Audubon of Illinois had constructed 4 Chimney Swift towers in spring 2014. One of those four, at Brunner Family Forest Preserve in Carpentersville, had occupancy the first season. Three Swifts successfully fledged. Would the Chimney Swifts return to this tower in 2015? Many questions flew around my mind that winter. Is it really possible for a tiny, 5 inch, 0.8 ounce Chimney Swift to travel about 6000 miles and return to our 12-foot wood Chimney Swift tower? Would they survive the weather conditions, predators, unknown obstacles and find enough food and wintering habitat? Could our Brunner tower Swifts overcome it all and return to re-enter the 6" x 11" opening on the top of the tower? The winter's cold and snow brought no answers to those questions.

But winter doesn't last forever. The snow melted, Virginia Bluebells brightened up the dreary woods, Eastern Redbud's branches displayed their pink-lavender flowers and we had some answers. It was April when the first Chimney Swifts returned to Kane County. Our initial spring monitoring of the tower revealed Chimney Swifts flying near but none entering. It was disappointing but it was good to hear their chippering vocals. Two weeks later, during our second roosting monitoring, we observed the first Swifts entering the tower. And we had a surprise; 3 Chimney Swifts entered to roost.

During the summer it was obvious that nesting was in progress and the parents had a helper Swift in building the nest and raising the young. How I wished we had a camera inside. I didn't know for sure how old the young were and was surprised to observe entrances into the tower every 10-15 minutes during a mid-August monitoring session. How many where they feeding? How come they were feeding so frequent so late in the season? Or had the young fledged and were now taking short flights and returning to the tower to rest? I was unable to tell the difference in plumage from adult or young for the few seconds I saw them during tower entrances. More questions flying around my mind.

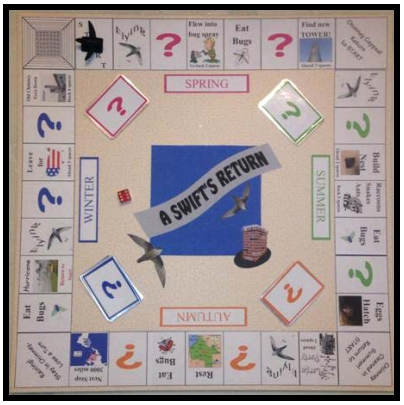
Fall revealed some answers. When we removed the tower's bottom grid for cleaning, we found 8 egg shell halves. Four Chimney Swifts had successfully fledged this year. Exciting! Looking at the tower walls we saw attempts were made to build a nest on three of the walls. The successful nest was secure on the wall under the sun guard. We also found that one of the adult Chimney Swifts left behind a tail feather. It was so interesting to see the center spine up close and feel its sharpness and sturdiness. As I studied that feather, I appreciated even more the tiny wonders of the Chimney Swifts.

Swift Watchers
Photo courtesy of Marion and Rich Miller

Another especially enjoyable presentation was at the opening celebration for the Brunner Family Forest Preserve. We set up a table with information and developed a board game to help educate children and adults in a fun way. The game called "A Swift's Return" was inspired by the questions mulled over during the long winter months.

(Continued on page 12)

Besides a successful nesting tower, Kane County Audubon was also successful with many Chimney Swift community education efforts this year. We hosted our first Chimney Swift Sit. We had 38 participants view almost 3000 Chimney Swifts entering one chimney during the fall in Elgin. We sent out a small mailing to Chimney Cleaning services to educate and provide a free resource for their customers and employees who had questions about Chimney Swifts. Multiple presentations were given to neighboring Audubon groups and the general public about Chimney Swifts and what could be done to help them. We influenced three more Chimney Swift towers, in neighboring counties, to be constructed. One of these was for a girl scout working on her Gold Award Project.



A Swift's Return board game
Photo courtesy of Marion and Rich Miller

Rich Miller
Photo courtesy of Marion and Rich Miller

(Continued from page 11)

Yes was the answer to all my winter questions. Our Chimney Swifts did overcome it all and return to the Brunner Family FP tower in Carpentersville. We hope the spring of 2016 will again see a Swift's return to the tower. Our other 3 towers did not have occupancy in 2015 but we hope that will change in the upcoming spring. Is it possible?

Marion and Rich Miller
Kane County Audubon/Illinois

Brunner Family Forest Preserve (Carpetersville, IL) 4 eggs, 4 hatched 7 roosted
Jelke Creek (Sleepy Hollow, IL)- No occupancy
LeRoy Oakes (St Charles, IL)- No occupancy

QUESTIONS AND ANSWERS...

I am writing you now with a question about Swift towers. Four years ago I led the restoration of an historic communal roosting chimney along with building an adjacent nesting tower. The tower was constructed of decorative block, 4' x 4' x 16' high and has four, 3' x 4' professionally-done educational signs attached. Since construction it has attracted a nesting pair each of four years and been accessible to thousands of people using a nearby State Bike Trail.

Since I began watching Swifts more than fifteen years ago, we have lost three of the four local historic communal chimneys I identified, so I am looking to do a couple more tower projects. However, if possible, I would like to try to make them big enough that they would also serve as communal roosting towers. Is there a height and diameter that you feel should be achieved to try to be successful?

I recently found a chimney in an older home that appears to be serving as a communal roosting chimney. It is approximately 25 feet high and probably 2' x 4' outside dimension. Height is obviously my biggest concern as I feel there are construction and safety concerns as height is increased. I plan to count at it tomorrow evening to check on numbers as well as exact size of the chimney.

I will appreciate any thoughts you have.

Surprisingly, before I got a chance to write you I had part of my question answered while doing an Audubon MN Swift Sit Count this past Sunday. We were counting at the Chimney we restored with a nearby nesting tower we built to also serve as an educational kiosk.

Amazingly, while we were counting birds entering the chimney about 75 yards away up a hill above us, I started seeing birds in my binocs that took up the whole field of view. When I took a few seconds to pull my eyes away from counting the chimney birds, I saw lower flying birds that were circling and dropping into the 16' high tower only 50 feet away from where we were sitting.

So, I guess a 4' square, 16' high tower can work as a roosting chimney, as I suspect you were trying to convince me it would.

On a related note, I am meeting with a nun next week at Assissi Heights, a beautifully constructed limestone nun residence modeled after the Basilica of St. Francis in Assissi, Italy. It has a spectacular large limestone chimney which could be a great Swift roosting chimney if we can figure out a way to shut the boilers down for a couple of months.

Some of the nuns still residing in the facility, including the one I am meeting with, are very environmentally and socially conscious, so I am hoping we might figure out a way to make this happen.

Greg Munson
Rochester, MN

Report from Travis Audubon's Chaetura Canyon Bird Sanctuary

For a virtual hike through Chaetura Canyon go to www.ChimneySwifts.org and click on the "Chaetura Canyon Bird Sanctuary" link

Chaetura Canyon Bird Sanctuary is a ten acre preserve of the Travis Audubon Society of Central Texas. Paul and Georgean Kyle remain the Sanctuary Stewards and continue research and educational efforts on behalf of Chimney Swifts that were begun by them on this property in 1989.

Eighteen structures have been constructed specifically for Chimney Swift nesting and roosting. Ten of the towers are constructed of wood. The dimensions of two are 24"x24"x 22' tall. The remaining towers are elevated on angle steel legs with the following tower dimensions: 14"x14"x12' (1); 14"x14"x8' (4); 24"x24"x8' (2); 20"x20"x20"x8' triangular (1). The other eight towers are constructed of concrete block in the following dimensions: 48"x48"x 12' (1); 20"x20"x10.5' (7).

The spring of 2015 was unusually cool and wet for the Central Texas area. Tree branches were so saturated that the swifts had difficulty in successfully breaking off small twigs for their nest construction. Quite often, as the birds grasped a twig and attempted to complete their "snap and fly" behavior, they simply rode the soggy twig downward before letting go and being flung aside. As weather conditions improved, they became more successful. Sixteen of the eighteen towers were occupied by nesting pairs. A total of 84 eggs were produced, 60 (80%) of those hatched and 56 (93%) hatchlings survived to fledge.

CHIMNEY SWIFT PRODUCTIITY AT CHAETURA CANYON - 2015

	Tower	# Eggs Laid	# Eggs Hatched	# Young Fledged
Wooden:	1. North Observation	5	3	3
	2. South Observation	11	6	5
	9. West Field	4	4	4
	8. East Field	3	3	3
	5. Prism	9	6	5
	4. Garden (Marlene)	7	5	5
	16. Workshop	9	4	4
	14. 12' Demonstration	6	6	6
	17. Jack Freeman	5	5	5
	18. Powers Tower	6	4	3
Concrete:	6. North Pool	5	4	3
	7. South Pool	1	1	1
	3. Castle	6	3	3
	11. Castle Companion	2	2	2
	12. Castle Gate	1	1	1
	10. Driveway	0	0	0
	13. S.W. Corner	4	3	3
	15. LBB	0	0	0
	Totals	84	60	56

One of the 22 foot tall wooden towers attached to the residence attracted what we assume to have been an inexperienced pair of swifts with possible compatibility issues. Nest construction was begun on the western wall of the structure, ten feet four inches from the bottom, it was soon abandoned and a second nest begun just below the first. They continued moving downward until finally completing their sixth nest on the south wall just below the historic nesting site for the tower… located six feet from the floor. The pair did produce three offspring.

The first swift arrived on March 21 and the roost of 124 individuals dwindled to zero on October 17. Chimney Swifts were present at Chaetura Canyon for 211 days in 2015.

Six nests all started in the same tower in 2015. The sixth nest (the one the swifts finally used) is the lowest and largest in the photo. The fifth nest is just above the final nest.

Photo by Georgean Kyle

Chimney Swift Working Group on Facebook

Following the Chimney Swift Conference in Quebec in 2013 a FaceBook page was formed for the discrimination and sharing of ongoing information about Chimney Swifts. Consider joining!

https://www.facebook.com/groups/ChimneySwift/

Building Smaller Nesting Towers

Our book "Chimney Swift Towers: New Habitat for America's Mysterious Birds / A Construction Guide" is now 10 years old. The proven designs detailed within have provided many nesting and roosting sites for Chimney Swifts all over North America. The feature design is the 12' wooden tower, and it remains a great tower. When possible it should probably still be the choice at a location where only one tower will be constructed since it is more likely to attract a roost as well as a nesting pair. However, we now have built enough 8' nesting towers to be able to share a proven design.

We briefly discussed 8' towers in the book, but provided minimal information at that time since the design was still in the testing stage. During testing we discovered that simply making the tower shorter had some problems - primarily over-heating. What we developed is a tower that is shorter in height, but larger in diameter with a circulating air space between the rigid insulation and outer siding. To date we have built more than 20 of this design - only three have not yet attracted swifts, and those are the ones most recently constructed. The design is easier and less expensive to built and easier to maintain.

We recommend Hardi siding as the exclusive product of choice for siding the towers. Although more difficult to work with than wood (special blades and drill bits are required), it is completely smooth (eliminating the need for a predator guard) and it holds the paint much better than wood. 2' x 8' x 1/4" smooth Hardi soffet panels are readily available. The outside of the towers are the size of the panels: 2' x 2' x 8' - some drilling, but no cutting is required. The material is available in several textures but we highly recommend the "smooth". It is also available with pre-drilled vents, but these are inappropriate. Use the "smooth / no vent" product.

Detailed here is a supplement we are now sending out with every "Tower" book order.

Paul and Georgean Kyle

This tower is a modification of the 12' tower described in the book "Chimney Swift Towers" by Kyle and Kyle. The modifications include:

- The nest chamber is shorter (8')
- The nest chamber is larger in diameter (19 ¾" x 19 ¾" inside). The T1-11 panels need to be cut 19 ¾" and 21" wide, just 4 of each rather than 6
- The bottom needs to be 19 1/2" x 19 1/2"
- The top needs to be 24" x 24"
- There is a ¾" air space between the foam insulation board and the exterior sheathing.
- The inside corners are made of 1" x 2" material rather than 1" x 4"
- There will need to be outside corners made of treated 1" x 4" material to cover the inside corners and the foam insulation. This will create a 3/4" airspace between the insulation and outer sheathing.
- There will need to be lower vents installed between the 1" x 4" outside corners at the bottom of the tower. These are pieces of 1" x 2" x 16 1/2" treated lumber with 3/8" vent holes drilled and the pieces wrapped with window screening (see photo at the end).
- We recommend using 2' x 8' x 1/4" smooth Hardi soffett for the exterior sheathing. If the tower is built to the dimensions specified, you can use the Hardi as it comes from the manufacturer without having to make any cuts. You will need to drill vent holes near the top using a 1/2" masonry bit.
- Because the diameter of the tower is larger, the foundation is also larger (5' x 5') but can be thinner (5 ½").

Otherwise, the materials and general construction are the same. The following instructions are a supplement to the instructions in the book.

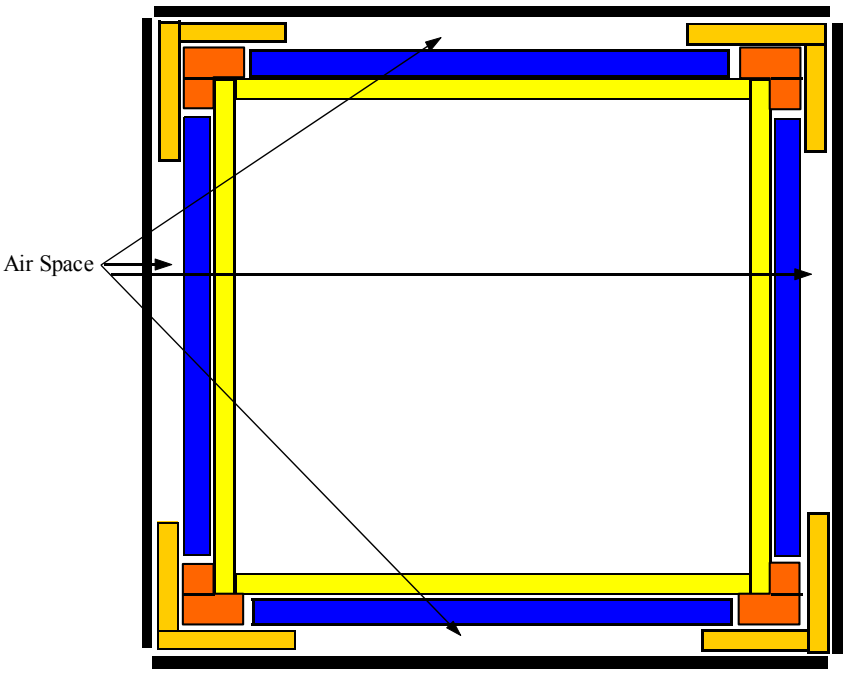
Note: The outside panels are made of ¼" thick Hardie panel. This concrete and fiber product is very brittle until installed. Do not pick up or carry in the middle from a flat position, or the panels may break. The proper way to handle these panels is to tilt them until on a long edge and carry them in a vertical position. It is safer to have two people handle and carry each panel.

- Spray all sides of the steel legs with two coats of primer and two coats of paint.
- Mark the location of the grooves on the smooth sides of all the T1-11 panels.
- Assemble the nest chamber sections as described in the book (page 32 Step 5)
- Continue through Step 3 on page 35, then install the 1" x 2" cleats on the four sides of the tower base between the steel legs. Note: Be certain to use only the 1 ¼" screws. Longer screws will protrude into the nest chamber and create a hazard for the swifts. Do not place screws where they will protrude between the grooves on the inside (this is why the outsides are marked).
- Assemble the top and sun collar and paint with two coats of white or light-colored exterior paint.
- Build a foundation form box from two 2" x 6" x 10' boards. The outer dimensions should be 60" x 60". Place the form box on the installation area, mark the area and excavate just enough to level the form box. Secure in a level position using four wooden stakes.
- Go to Step Four on page 35 and continue through Step Six. You will need thirteen 80 pound bags of Maximizer (brand) concrete or ~20 80 bags of regular concrete mix.
- Once the foundation has set up for 24 to 48 hours, remove the braces from the tower base.
- Install the top tower section on the base aligning the letters on the tower sections. Tap into place until the top section settles evenly onto the tower base.
- Install the 1" x 2" inside corner pieces. Note: Be certain to use only the 1 ¼" screws. Using longer screws will protrude into the nest chamber and create a hazard for the swifts. Again, be careful to install screws where they will *NOT* be in the grooves on the inside. Pipe clamps on the outside of the corners may be helpful in pulling the corners tight to the tower.
- Using a razor knife, cut the insulation board to fit between the inside corners. Install with the shiny side out. To make the best use of the materials provided, it is best to measure between the inside corners and cut off 4' sections of the insulation.
- Install the larger outside corners using the 1 5/8" screws. Make certain the bottom edges of the corners are even with the bottom of the tower. Pipe clamps on the outside of the corners may be helpful in pulling the corners tight to the tower. However, it is a good idea to measure the outside of the corners to make sure the tower is the same width at the top, middle and bottom before screwing the corners in place
- Install the lower vents between the outer corners lined up with the bottom of the corners using the 1 5/8" screws.
- Install the top on the tower with the Sun Collar on the NORTH side of the tower using 1 5/8" screws.
- Install the ¼" Hardi panels with the 1 5/8" screws making certain that the bottom edges of the panels are even with the bottom of the tower AND are centered on the sides of the tower AND the vent holes are on the top.
- Paint the exterior panels with two coats of white or light-colored exterior paint. Allow to dry at least 2 hours between coats. Allow the final coat of paint to dry at least six hours
- After the final coat of paint has dried at least six hours, install four pieces of 2" x 2" hemmed metal corner trim on the tower. Standard trim is 10' long, so cut them 95". The shorter pieces will be used for the top. Pre-drill every 12" and use 3/4" sheet metal screws. Note: Line up with the bottom of the tower. The pieces will fall short of the top, but that gap will be covered with the top trim.
- Using tin snips, cut the four pieces of top metal trim to the correct length (measure each side individually as there may be some small differences) and pre-drill. Install on the top edges over the corner trim using ¾" screws.
- Install vents over the top vent holes using ¾" sheet metal screws.
- Remove the form box, back fill with soil around the foundation, and tamp in.
- Apply a 2" band of Tanglefoot insect barrier around each of the tower legs just below the bottom of the tower to exclude ants.

Most materials (T1-11, lumber, screws, etc.) can be found at most home building centers.
2" x 2" hemmed metal corner is available from metal roofing supply companies.

Please refer to the book "***Chimney Swift Towers***" for information on annual maintenance.

If you have any questions or concerns, please email Georgean and Paul Kyle
Kyle@ ChimneySwifts.org.



8 Foot tall Tower Cross-section

5/8" T1-11 siding: 19 1/2" and 21"
3/4" x 3/4" and 3/4" x 1 1/2" inside corners
3/4" x 3 1/2" outside corners
3/4" rigid foam insulation
1/4" smooth Hardi Soffet 2' x 8'

Lower vent to place between 1" x 4" corner pieces on bottom sides of tower

Vent holes in Hardi siding

Upper vents in place

2015 ANNUAL REPORT

Chimney Swift Conservation Association

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An Association Dedicated to Promoting Research Education and The Conservation of Chimney Swifts (Chaetura pelagica)

Editors for ***Chaetura***
Georgean and Paul Kyle

After more than three decades, the Driftwood Wildlife Association (DWA) has reorganized under a new name. Established in 1983 as the Driftwood Bird Banding Association, the founding members worked under state and federal permits to study the distribution, migration, survivability and reproduction of native avian species. As the organization grew to encompass wildlife rehabilitation and educational efforts on behalf of native birds, mammals and reptiles, the name was changed to DWA to better represent those additional activities. Today, the focus of bird banding and wildlife rehabilitation has been replaced by education and conservation efforts to benefit a single declining species. Chimney Swift conservation and educational projects, initiated by DWA in 1983, will continue and have now become the primary focus of your organization. Effective April 1, 2015 DWA became *The Chimney Swift Conservation Association (CSCA).*

As project directors of the Chimney Swift conservation programs of DWA since its inception, we have "officially" taken over all of the responsibilities and activities of the organization. Paul created and actively maintains the original ***www.ChimneySwifts.org*** web site for DWA. Therefore, the site will remain the same great resource it has been for so many years. The ***Chaetura*** newsletter that Georgean has been editing since 1997 and all of the products and publications developed by DWA are also still available.

The only substantial change is that the Chimney Swift Conservation Association is not a registered 501 (c) 3 organization, so donations are no longer tax deductible. However, all donations and sale of merchandise and publications will continued to be dedicated to the support and maintenance of the ***www.ChimneySwifts.org*** website and ongoing Chimney Swift conservation projects.

We wish to express our thanks to the many members, supporters and contributors who helped make the Driftwood Wildlife Association a continent-wide conservation organization, and look forward to your continuing support as we move forward as the Chimney Swift Conservation Association. We welcome your comments on past and current projects as well as suggestions for the future.

Georgean and Paul Kyle
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Chaetura

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Visit our web site at:
www.ChimneySwifts.org

In addition to learning more about the North American Chimney Swift Nest Site Research Project, you can:

- ◊ track the spring movements of Chimney Swifts
- ◊ download past issues of **Chaetura**
- ◊ order publications and merchandise

Send your e-mail to Kyle@ChimneySwifts.org

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Unless otherwise specified, all articles and photos are by Paul D. Kyle and Georgean Z. Kyle
All artwork is by Georgean Z. Kyle.