Chaetura

Winter 2018

Chimney Swift Conservation Association

Volume 21



IN THIS FINAL ISSUE: Lac-Édouard Canadian Conservation Bill Evans 9 Historical Roosts 10 Chaetura Canyon 14 Here and There 16 Next Generation 19 Vocalization CD 20 Questions and Answers 22 Vaux's Swifts 25 Annual Report 26 Contributors 27



100 Chimney Swift Towers for Western Pennsylvania



In the spring of 2016, Audubon Society of Western Pennsylvania (ASWP) celebrated its centennial anniversary. To commemorate the event, a Centennial Capital Campaign was initiated and several ambitious "100" projects were launched. The capital campaign sought to raise funds to update three centers owned by the organization, and provide capital for the conservation projects. The conservation projects ranged in their focus. Becoming 100% carbon neutral was a concept that played off of the centennial anniversary, but also illustrated the organizations commitment to sustainability. Another idea that floated to the surface was to install 100 Chimney Swift Towers in western PA. ASWP had already installed dozens of towers throughout the region, and many were occupied with nesting Was it possible to install 100 additional towers during the centennial year? In the year leading up to the centennial, ASWP staff worked to determine the feasibility of this project by discussing the opportunity with local funders.

The concept was discussed with foundations throughout the region. The (Continued on page 2)

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Pittsburgh Foundation immediately offered support for the project. Their commitment led us to the Allegheny County Parks Foundation, where we also received positive feedback. In fact, while discussing the project with Parks Foundation, it was suggested that the gifts from the two foundations may leverage additional funding from Allegheny County, if the towers could be installed within parks owned by the county. After successful discussion with the county, and the two foundations, a \$198,000 budget was established for the project.

This project aimed to install 100 new swift towers in the nine parks owned and operated by Allegheny County. These parks are scattered throughout the county surrounding Pittsburgh and range in size from 800 to over 3,000 acres. The parks are popular destinations for outdoor recreation ranging from hiking and biking to swimming and fishing. Because of the opportunity this project provides for data collection, the project also aimed to establish a web-based data collection portal, so information pertaining to nesting and roosting swifts could be assembled and managed.

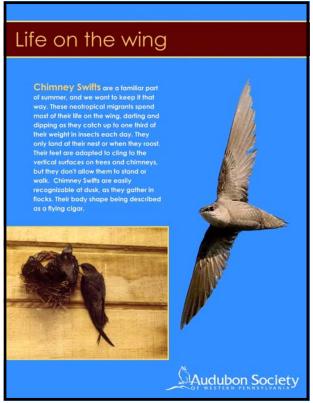


After a considerable amount of planning with our new partners, the first swift towers were installed in May, 2017. Allegheny County's Executive joined us for a ribbon cutting ceremony when the first tower was completed. From there, our contractors averaged a total of 3-4 towers per week. Their efficiency depended upon weather and distance of the park from their shop. The total number of towers installed at a given park was determined by the size of the park and available locations. The smallest park received 7 towers, while the largest park received 22.

Educational graphics were installed at each of the towers. The graphics describe "Why is this Tower Here?" and "Life on the Wing"- a brief description of the importance of Chimney Swifts.

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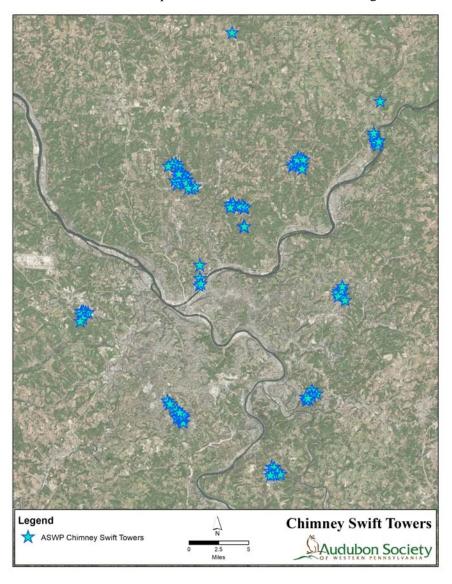
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All of the towers were geo-referenced and numbered with a unique tower code, so we could track success. Towers were also labeled with a QR code, which when scanned, directs people to our website for additional information on Chimney Swifts and our data entry portal.

All of the towers are identical in their construction. Only a few modifications were made to the original "Kyle" design that can be found in the book. Our roof and footing modifications made construction a bit more efficient and better aligned to our local building practices. Additionally, a fiber cement siding panel was chosen as the finished tower façade – the material is nearly indestructible, waterproof and insect resistant. A high-quality acrylic paint and fiber cement trim boards were applied to achieve the board and batten look of the towers.

Installation of the 100th tower was completed in December, 2017. The new towers not only provide new and valuable nesting habitat for our local Chimney Swifts, but raise the visibility of ASWP's bird conservation goals in western Pennsylvania. It is estimated that one million people will encounter one or more of these swift towers each year in the parks.

2018 marked the first season for the completed towers, and for our monitoring efforts. We have trained several volunteers to help monitor the towers, but we do not yet have full coverage for all of the parks, or for all of the towers (when combined with our previous efforts, these towers bring our total to 145 towers in western Pennsylvania).

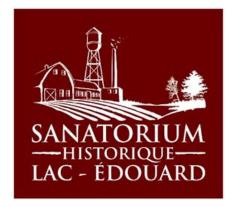


However, with limited monitoring effort, we know that dozens of towers were occupied. We also know from our own experience, and from the experience of others throughout the east, that towers can become occupied years after installation. So, we look forward to collecting information in the years to come, to learn as much as we can about the birds, and their behavior at these artificial nesting towers.

Audubon Society of Western Pennsylvania would like to extend its sincere appreciation to our partners, Allegheny County Parks, Allegheny County Parks Foundation, and Peaceable Kingdom Fund of The Pittsburgh Foundation for making this project possible; and to Paul and Georgean Kyle for their dedication to Chimney Swift conservation — their inspiration paved the way for the rest of us.

Brian Shema, Operations Director, ASWP

All photos courtesy of Audubon Society of Western Pennsylvania



Sanatorium Historique Lac-Édouard
is a non-profit organization
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.

The grand opening of the Chimney Swift Interpretive Center and Museum at the historic Sanatorium of Lac-Édouard was celebrated on July 28, 2016. Guests included local politicians, biologists from across Quebec and local residents, some who had worked at the Sanatorium.

Founder of the non-profit organization, Simon Parent, lead a tour of the entire facility. The beautifully restored historic barn was the first stop where everyone enjoyed a glass of Champagne, each containing a fresh strawberry from his onsite farm. The history of the Sanatorium and his work to restore the many structures on the site were explained as he escorted the group through his strawberry fields and extensive vegetable gardens.

Réjean Parent continued the tour by showing the Chimney Swift towers that he has constructed on the grounds. One of the towers is the first artificial nesting structure to be occupied by Swifts in Canada. The tower was again hosting a family of swifts and visitors were able to observe the parents entering and exiting the tower with food for their nestlings.

Eric Parent proceeded to the 130 foot tall brick chimney. He explained the process of completing restoration of the structure which is now occupied by swifts. An iconic water tower adjacent to the chimney building is also occupied.

Presentations were then made inside the reconstructed visitor building which is now the Interpretive Center. Extensive educational materials festoon the walls as well as exquisite Chimney Swift carvings created by Réjean and also artifacts from the history of the Old Sanatorium and the community of Lac-Édouard.

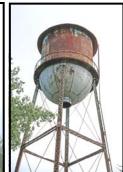
Karen Lacroix displayed her artful, hand-bound book about the history and Chimney swifts of Lac-Édouard, and premiered her documentary film.

The Kyles showed a video of a nesting season of swifts inside a tower. Simon translated the video to the French audience and then led a Q & A session. Réjean was presented a specially-commissioned sculpture by local artist Edith Beland for his extensive work on the restoration of the buildings and for his many carvings of swifts. Réjean then gifted the Kyles one of his hand-carved swifts.

That evening, 66 swifts entered the impressive, beautifully restored old chimney.

Restored historic barn





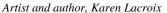
Restored roost chimney and iconic water tower



Chimney Swift
Interpretive Center with it's
signature Red Roof
and chimney in the background

(Continued on page 5)







Inside the Chimney swift Interpretive Center



Georgean, Réjean and Paul

(Continued from page 4)

In 2017, we retuned to Lac-Édouard with assistance of grants from Fondation de la Faune du Québec, Service Canadien de la Faune d'Environnement Canada, and Regroupement Québec Quiseaux. Our goal was to assist Réjean in constructing ten new Chimney Swift towers. He was well underway by the time we arrived on August 9th, and six days later, ten were completed and two were installed on the Sanctuary. We also worked with Simon and Réjean to assist local Marc-André Bernard and his wife Suzanne install a tower on their lake-side property.

While in Lac-Édouard, we participated in and made a presentation to an art school led by international artist Karen Lacroix from Porto Portugal. Many of the finished artworks of the students incorporated Chimney Swifts into their projects.

We left Lac-Édouard on August 15th for Granby, QC. There we met with Simon, Marc-André and Isabelle Devost to discuss an educational partnership between Sanatorium Historique Lac-Édouard and the Granby Zoo where Isabelle is a resident biologist and Conservation Coordinator for the Granby Zoo.

We are gratified and encouraged by the level of dedication and commitment to Chimney Swift conservation in Quebec, and we wish them well in their continuing efforts.

Georgean and Paul Kyle

(Continued on page 6)



Réjean and Georgean working on towers



Georgean cutting siding for the towers



Paul going "upstairs" to install the cap and sun collar



Paul, Georgean and Réjean

(Continued from page 5)

2018 Update from Simon Parent, President Sanatorium Historique Lac-Édouard

What has been done?

- Lac-Édouard's Chimney Swift roost has been under observation by Canadian Wildlife Service for more than 15 years because of its particular importance.
- The site was acquired by Ferme Boréale Lac-Édouard, who built a first prototype nesting structure in 2014 based on the Kyle's plan, which successfully hosted a couple on the first year and beyond.
- Restored the historical roost of Lac-Édouard sanatorium in 2015, which is at the boundary of the specie distribution area and among the rare sites in a completely natural environment with old growth forest
- In 2015, we performed a preliminary survey of large snags in the area. We have identified a concentration of large hardwood trunks (Yellow Birch and Maples) around the ecological reserve Judith-De-Brésoles, which contains more than 100 km2 of woods untouched since the great fire of 1903.
- We have built 18 new nesting structure between 2015 and 2017, using different shapes and material, with the precious help of the specialists in the domain, Paul and Georgean Kyle. We have developed an Interpretation Center for Chimney Swifts that shows replicas of habitats (snag, artificial nest, historical roost) along with carvings of the bird in different positions done by Réjean Parent, a very talented wildlife artist. The work has also been supervised artistically by the contemporary international artist Karen Lacroix, who also produced a short-movie and a limited edition book expressing how humans and swifts are linked together, both by history and behaviour.

What is coming up?

- We have developed a unique partnership with Chaetura Canyon to become Sister Sanctuaries, which define our mutual goal of conservation and awareness over the whole nesting area and establish our eternal friendship.
- From this association, we have developed another partnership with the Granby Zoo, second largest zoo in Canada that receives over 700K visitors per year. We will develop our interpretation and awareness programs simultaneously with their own, as well as proposing new research on swifts and insectivorous birds involving high-tech localisation devices to identify nesting structure in their natural habitat and study them.
- Sanatorium Historique Lac-Édouard hopes to receive visitors that will come on-site to learn about and observe swifts and other insectivorous endangered birds, as well as relax and benefit from the peaceful environment of the borealis forest.



"Chaetura Canyon Bird Sanctuary, Travis County , TX, USA Sanctuaire du Martinet Ramoneur, Lac-Édouard, QC, Canada



Simon Parent, 2016

Winter 2018 Chaetura Page 6

More Conservation Efforts in Canada

My husband Richard (Woody) Hamel and I have a great victory after a two year effort in our neighborhood. The local school, Bayview Heights Public School, (Pickering, Ontatio) capped a chimney in which chimney swifts were nesting. When we moved to our neighborhood in 2010 we saw swifts there and others observed this too. Then nothing. We did not figure out what had happened for a few years as to why they did not return. Now we have two children who attend the school and we tried to get Durham District School Board to remove the cap, to no avail.

However, my husband has managed to get the school to build a tower beside the chimney where they used to nest. We understand it's not the same as uncapping the chimney but feel it is a victory nonetheless. We have ordered your books on building towers, which Cornell Ornithology Lab recommended. I know the artificial habitat is difficult to attract swifts so we want it to be the most successful design. Being in Canada, we were wondering about heating, but it appears from your 2016 Spring newsletter that a tower was successful in Quebec, so that gives us hope.

The great thing about this project is that the Board is now fully supportive, and two local high schools will be involved in building the tower as well. We will be setting up a social media presence on Face Book and Twitter to raise awareness and to track the progress of the project.

Thank you for the wonderful resource of your website, as well!

Best regards,

Jean Hamel

Toronto, ON

I was approached by a wonderful organization from Granby, the city where I live, which is called Zoo de Granby. It is the second largest zoo in Canada and one of the best I have seen in the world! They want to collaborate closely in our global Swift project and we will have many ideas to share during a first meeting next week. I would like to introduce you to Isabelle Devost (in copy) who is coordinator of the conservation program at the zoo and involved in conservation project with many species. The zoo receives close to 700,000 visitors per year so they have an extremely large capacity to educate the public to our cause. Isabelle had some questions about nesting structures that I am sure you can answer better than anyone else...

Simon Parent

Here at the Conservation and Research department of the Zoo de Granby, we are running conservation projects on different species such as the endangered spiny softshell turtle and bats. We are currently developing projects on aerial insectivores. More specifically, we want to develop a global program involving different projects on the Chimney Swift, and to collaborate with different organizations already working for the conservation of this species. Which is why I have been in touch with Simon Parent about the wonderful project they are doing in Lac Edouard, and we are discussing many possibilities of collaboration, such as for outreach and awareness programs as well as scientific studies.

We will develop these ideas with more details at our next meeting, which has been a bit delayed because of the huge snowstorm (not good for the birds that already started their spring migration!), but one of the studies we would like to conduct is about parameters influencing the utilization of artificial chimneys here in Canada. Why is it working so well in the US and not in Canada, is it just about temperature? The team at Lac Edouard is already taking temperature measurements, and I would be interested in including these in a broad comparison of data from occupied artificial chimneys VS non-occupied artificial chimneys VS occupied building chimneys. As there are actually only two artificial chimneys successfully used for breeding here in Quebec, I would like to include data from successful artificial chimneys from the United States. I was thus wondering if you are taking measurements such a temperature in your chimneys at Chaetura Canyon? Do you see preferential use of some types of structures or have ideas about other primordial parameters of nesting structures?

Isabelle Devost | biologiste, M.Sc. Coordonnatrice, Conservation Zoo de Granby | 525, rue Saint-Hubert, Granby, QC

(Continued on page 8)

More Conservation Efforts in Canada

(Continued from page 7)

We look forward to working with you any way we can! We do not believe the lack of success with the Chimney Swift Towers in Canada is a result of the temperature. We have several colleagues in Minnesota who have had remarkably good results building the towers to our specifications and their temperatures are comperable to yours. We believe it is the interior materials that have been used.

The product we use and recommend (T1-11) is apparently difficult to obtain in Canada. Many of the materials used as a substitute simply did not have enough texture for the swifts to hold onto. There was one instance recorded on video camera of a swift entering a Canadian tower and trying to grab hold of the wall. When it could not, it exited and did not return. However, when Rejean Parent used the materials as specified in our book at Lac Edouard, he had success the first year. In fact, when we were in Lac Edouard last summer, there were again swifts nesting in "his" tower.

If T-1-11 is not available, very roughly-textured wooden boards could be installed horizontally inside the tower, or horizontal slots could be cut every 4 inches on the inside panels before assembling the tower. Either would provide adequate foot-holds for the swifts.

Regarding temperatures: When we first started building towers 30 years ago, we took meticulous temperature readings using data loggers as well as internal / external temperature measurements. We believed our initial failures were due to over-heating, and the data confirmed that hypothesis. We were testing insulated versus un-insulated towers. The insulation kept the inside temperature of the towers 3 to 5 degrees F cooler than the ambient air temperature.

We have found that the swifts prefer wooden towers to the concrete structures we have built. The saliva that they use to build their nests adheres better to wood than to masonry. It seems logical since they evolved to nest in hollow trees. Our towers are more artificial hollow trees than they are artificial chimneys. (ed.)

I am working on the Recovery Strategy for the Chimney Swift in Canada. I have yet to determine the best period of time of day to observe a chimney to confirm the presence of swifts in a nesting site. In our protocol we mention half an hour of non-stop observation of the chimney during the period that parents feed chicks.

In the literature I have found one hour of observation. I have not found in your book this kind of information but I am thinking that with all the videos you had made inside of occupied chimneys you might have a compilation of periods of time swifts are in and out when feeding young.

In short, how long does an observer have to wait in front of a chimney in order to have a good chance of seeing a bird enter or leave during the nesting period (incubation, and breeding of the young.) Would 30 minutes observation be able to detect 80% of use cases?

François Shaffer

Biologist, Canadian Wildlife Service Environment and Climate Change Canada, Government of Canada

Adult Chimney Swifts are atypically quite and clandestine when rearing a family and easy to miss, so we would recommend a full hour. The best time would probably begin 30 minutes before sunset. That time of day the parents will be feeding closer to the nest site, lower to the ground, more visible and vocal. Observations within the first hour of sunrise may also be productive. (ed.)

More Conservation Efforts in Canada

Timothy Street Park Chimney Swift Tower Project

The Timothy Street Park Chimney Swift Tower Project was initiated by former long-time Streetsville resident, Bill Evans, who was born in Streetsville in 1931. Evans is a self-taught naturalist, who often explored the Credit River's natural habitats as a young boy. In his youth, Evans was fascinated by the hundreds of Chimney Swifts he often observed by the local power dam. More recently, Evans observed Chimney Swifts nesting in the chimney of the Streetsville United Church and was determined to provide a local safe harbour for these birds.

Evans partnered with his friend, Rusty Rustenberg, a former Ministry of Natural Resources Conservation Officer, and the South Peel Naturalists to develop a proposal for an artificial Chimney Swift tower that would provide a safe harbour for the local population of Chimney Swifts. Evans and his "Swift Action Team" worked with Councillor George Carlson and the City to find a suitable location for the tower. Timothy Street Park was chosen.

Apprentices at the Ontario Masonry Training Centre in Mississauga built two 18-ft. towers; the Cement Association of Canada donated cement for the foundation, Forterra Brick donated the bricks for the tower, and Harris Rebar provided rebar.

The city of Mississauga has now installed one of his chimneys and a ribbon cutting ceremony was held on August 12, 2016.

Laurina Manzutti

















Before After Construction detail

I am the facility manager at Faith Builders Educational Programs, a private Mennonite school in Guys Mills, PA. Our school utilizes an old brick building—formerly a public school. We are in the process of demolishing an obsolete brick chimney on our building because of structural safety reasons. It is no longer used or needed for heating purposes. The problem is that it has been home to a flock of chimney swifts. Our students enjoy watching the swifts and we believe they benefit us by eating mosquitoes, etc. We'd like to complete the project without long term harm to the colony, but need some expert input about our options for providing an alternative home for the swifts.

We plan to demolish the chimney down to 4 feet above roof level. That leaves at least 25 feet of internal chimney space inside the building between the roof and basement boiler room. I am assuming that if we leave an opening in the remaining stub at the roof, the swifts will continue to use it. But we would like to reduce the opening somewhat with a partial cap, to keep rain and weather from further deteriorating the building. So how large or what kind of an opening will the swifts require? Does that opening need to face the sky or can it be on the side?

If you have any advice, please let me know. I've attached a picture of the building including the chimney so that you can picture our situation. (July 2016)

Sheldon Kauffman Operations Administrator Faith Builders Educational Programs Guys Mills, PA

We are delighted that you are making an effort to save the majority of this structure. A 25' chimney will certainly provide adequate space for your Chimney Swifts to continue to roost. The opening really should be open to the sky and left as large as possible. However, if the opening must be reduced, it should still be at least 16" x 16". Be certain to avoid any sharp edges on any cap that might injure the swifts when entering the chimney.

We are copying Brian Shema with Audubon Pennsylvania. He may have some additional input. Thanks very much for your interest and concern. Please keep us updated on the project. (ed.)

(Continued on page 11)

(Continued from page 10)

I echo the thoughts above. I would also add that timing of your demolition can be very important. While I understand an entire project can't be scheduled around the birds, you clearly understand and care about the birds. So, winter would be the ideal time to do the demolition, but the critical period to avoid is April 1 through July 1 (now behind us), and September 1 – October 15.

Other than that, we would be very interested in learning how quickly the swifts adapt to the change in the chimney. If you demolish the chimney now (summer), I'd be curious if the swifts roost in it this fall. I suspect they will, but would love to know for sure. That knowledge would help us address other questions in the future.

Thanks much for your efforts, Sheldon! Brian

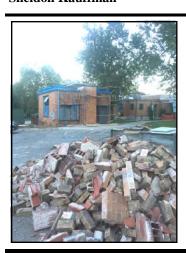
Thanks to all of you for replying so quickly. Your info is helpful. Unfortunately, the project will need to be completed this summer but we should easily be able to finish before the September deadline. I will talk with our contractor about designing a restructured chimney cap with an opening to suit the birds.

One thing I didn't mention is that we actually have two large chimneys on our property—about 200 feet apart on two different wings of the building. The one that is not being demolished this summer is in good shape and we don't have plans to remove it at this point. In fact, this spring when the birds showed up, they roosted in this second chimney rather than the one slated for removal. So the scenario is ideal in that the flock has two options when it comes to roosting on our site. I'm guessing that our typical flock numbers in the hundreds, but no one has actually tried to count them...

...By August 2016 our chimney renovation project on the east wing was complete. We removed about 25 feet of the original chimney and capped the remaining 6-foot stub with a shingle hip roof with a 16" square opening in the tip of it. I've attached before and after pictures so you can see how we designed the finished the cap. I am also very happy to announce that the swifts are already using it! I just heard from someone living on site that he saw several swifts ducking into the new opening around dusk last evening. There is also quite a bit of swift activity centered around our other chimney (center wing, the one left intact). One of my co-staff has been watching it in the evening and he estimates several hundred roosting in there.

Thanks again for your advice and support. I've enjoyed learning much about these fascinating creatures through this project. I'm hoping to get our school involved in "swift night out" in September.

Sheldon Kauffman



In the spring of 2009, the decommissioned incinerator at Zilker Elementary School was reconditioned to accommodate Chimney Swifts at the urging of Kim McKnight whose daughter attended to school The cast iron fire door that had long since been removed and recycled was replaced with a removable plywood panel. The spark arrestor was removed by volunteers from the neighborhood fire department.

That fall the site was added to the list of chimneys and towers to be monitored on A Swift Night Out. Observers were not disappointed. Several hundred swifts were counted entering the chimney. In subsequent years, the chimney continued to be used as a nesting site in the summer and migratory roost in the fall.

(Continued on page 12)



(Continued from page 11)

On July 5, 2017 we received an email from Kim that the chimney had been demolished without notice as part of summer renovations on the school. We then contacted Michael Mann and Flo Rice at the architecture department for the Austin Independent School District. Our concern was that other similar chimneys on AISD campuses might also be in jeopardy. Michael Mann met us at the Zilker site to consider options.

The school district and architecture departments were unaware that any of their structures were being used by Chimney Swifts. The Zilker chimney had been demolished because of cracks in the brick veneer that created a safety hazard for the students. Michael Mann assured us had they known, other steps would have been taken. But all was not lost.

Only the upper section of the chimney had been removed down to the roof line of the attached building. Eight feet of the chimney remained, and there were clear signs of old nests in the remaining section. Michael agreed to have the contractor rebuild approximately 4' of the chimney above the roof line. Because it was now much shorter, we recommended a metal cap or "sun collar" be placed on top. This was done and reduced the opening in the top to darken the interior and protect it from rain.

The lesson to be learned was to identify all known roost sites, and with the permission of the owners, place informational signage. Funding was obtained from the Travis Audubon Society, bilingual signs were printed, and with the help of Flo Rice in the architecture department, permission was given to install signs on several AISD campuses.

(Continued on page 13)



Bilingual signs (English and Spanish) with text borrowed from the ASWP signs

Flo then arranged to have a spark arrestor removed from a 45' chimney at Brooke Elementary school. Greg Smith of Jamail & Smith Construction with B.J. Electric volunteered their services to remove the cap. The next step will be to check other campuses with chimneys and hopefully remove any other caps as well.

Georgean and Paul Kyle







Twig and Timber: A Nesting Season at Chaetura Canyon



- Filming / Georgean and Paul Kyle
- Editing / Georgean Kyle
- Captioning / Karen Lacroix
- Narration / Georgean Kyle
- Filmed on location at Chaetura Canyon Bird Sanctuary
- Music written and performed by Croak and Bark

Many years ago we produced a video that was a composite of videos obtained during a complete Chimney Swift nesting season at Chaetura Canyon. We have used this video as part of our presentations for more than a decade. Individual clips (or scenes) have been available on YouTube for some time.

In 2017, we added an English narration with French captions for use at the Chimney Swift Interruptive Center in Lac-Édouard. The video features the male "Twig" who added only tiny twigs to the nest and his mate "Timber" who preferred much larger building materials. "Twig" was one of 1200 Chimney Swifts Georgean hand-reared and released over our 19 years of licensed wildlife rehabilitation.

The video ends with swifts going to roost in the South Tower at Chaetura Canyon and then exiting in the morning.

The video can now be viewed on YouTube:

https://tinyurl.com/ycof49jk



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).

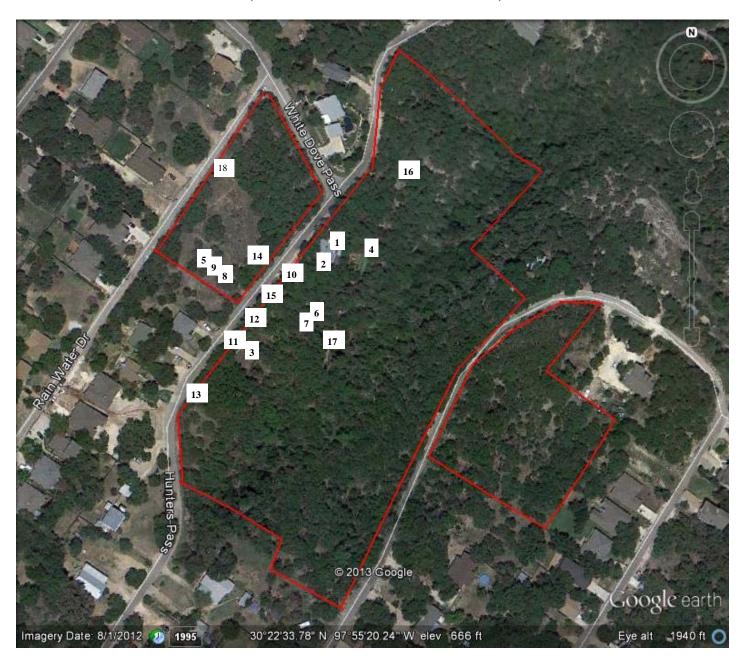
	First Sighting	Last Sighting	Days Observed Chaetura Canyon
2016	19 March	19 October	215
2017	25 March	10 October	200

CHIMNEY SWIFT PRODUCTIITY AT CHAETURA CANYON

		2016			2017		
	Tower	# Eggs Laid	# Eggs Hatched	# Young Fledged	# Eggs Laid	# Eggs Hatched	# Young Fledged
		Laiu	Hatched	Ticugcu	Laiu	Hatched	Ticugcu
Wooden:	1. North Observation	7	4	3	6	3	3
	2. South Observation	8	0	0	9	4	0
	West Field	4	4	3	5	4	4
	8. East Field	1	0	0	4	2	2
	5. Prism	6	3	3	5	3	2
	4. Garden (Marlene)	6	5	5	3	2	2
	6. Workshop	3	2	2	5	3	3
	14. 12' Demonstration	6	4	3	3	2	1
	17. Jack Freeman	8	6	6	4	4	4
	18. Powers Tower	3	2	2	5	5	5
Concrete:	6. North Pool	5	3	3	1	0	0
	7. South Pool	0	0	0	0	0	0
	3. Castle	2	2	0	2	2	0
	11. Castle Companion	6	5	5	3	1	0
	12. Castle Gate	5	4	4	2	1	1
	10. Driveway	0	0	0	0	0	0
	13. S.W. Corner	3	2	2	2	2	2
	15. LBB	0	0	0	0	0	0
	Totals	73	46	41	59	38	29

Chimney Swift Towers of Travis Audubon's Chaetura Canyon Sanctuary Travis County, Texas

(30°22'34.19" N 97°55'20.37" W)



The red lines indicate the current boundary of the Sanctuary
The towers are numbered in the order of their construction
with #1 being the first tower constructed in 1989.
The most recent tower (18) was constructed in the spring of 2014

Here and there 1.1

Wimberley, TX

The Patsy Glenn Refuge in Wimberley is a 1.7 acre property owned by the City of Wimberley as part of the Community Center property, but the Wimberley Birding Society has an agreement with the City to manage it as an in-town, easily accessible birding refuge and environmental teaching facility for school children. It has a chimney swift tower, which this spring had the first chimney swifts using it since it was built about 8 years ago in memory of Patsy Glenn.

Dell Hood

Mobile, AL

We purchased our home last year and had Chimney Swifts. They have returned again this year. They are so chatty in there! We just found out they were threatened. Just wanted to let you know we will continue to allow them to nest here (and clean our chimney too) every year. We're helping the population in Mobile, AL! Long live the Swifts,

Blair Ladd

National, IA

A group of swifts returned to National at the end of May and began nest building. Six eggs were laid in the Friends of Sherman Swift Tower. Five hatchlings fledged by August making a total of 21 swifts fledging from the tower since 2012.

Deanna and Harold Krambeer



Kane County, IL

We cleaned out the bottom grid on our Brunner FP tower (Kane County, IL.) This is the first time we found a whole egg at the bottom on TOP of the debris. There was a pinpoint opening near the top of the shell. I'm assuming this was an egg that fell out of the nest. Could it possibly of been an egg that never hatched in the nest and was pushed out on purpose? It saddens me to see our first un-hatched egg. On a positive note, we did find 6 egg shell halves, so 3 successful hatchlings! Our other 3 towers remain unoccupied.

Marion and Rich Miller

Spicewood, TX

A property owner is actively protecting habitat under the Conservation Easement Program in Central Texas. 12 towers have been constructed on this property. In 2016, all towers attracted breeding pairs of Swifts. Every pair successfully produced fledglings. In total, 51 eggs were laid, 41 of those hatched and 37 fledglings joined the dwindling population of the species.

Georgean and Paul Kyle

Johnson City, TX

All four towers constructed on Middendorf Ranch hosted swift pairs. A total of 24 eggs were laid, 24 hatched and 21 fledged.

The two Kiosk Towers at Pedernales State Park successfully hosted Swifts in 2016. The Tower at the headquarters entrance showed evidence of 7 eggs that all hatched and fledged. The Bird Blind tower appeared to have had two clutches, and that the swifts remained in the tower a while. Five hatched egg shells were on the top layer of detritus, and another 4 were covered up. In all, 9 eggs- all hatched and all nestlings fledged resulting in 16 fledglings from just two Assistant Superintendent towers. Flocke stopped by both towers and kept the very nice nest from the Bird Blind tower. Also, they have a display in the original bird blind with a couple of swift nests!

Lydia Middendorf

Sun Prairie, WI

Our local land trust has purchased a farm with two barns and 40 foot silos attached to them. We will be retrofitting them for chimney swift nesting sites. It is about 1/4 mile from a large marsh river system and will be surrounded by 200 acres of prairie grass.

Seventh Grade Science Patrick Marsh Middle School Sun Prairie WI

(Continued on page 17)

Here and there 1.2



Hockessin, DE

New Chimney Swift tower at Ashland Nature Center near Hockessin DE. A second one is going up across the street from the University of Delaware campus in Newark DE.

Steve Cottrell

Blanco County, TX

Swifts in the tower located at the West Cave Preserve produced 4 eggs. Three hatched and fledged.

Amber Goslin





DeGray Lake State Park, AR

New tower at DeGray Lake.

Amber Barentine Temporary Park Ranger DeGray Lake



Zearing, IA

I recently completed the Chimney Swift Tower I was building for my Eagle Scout Project. It is located at Dakins Lake County Park.

Sam Taylor







Gulfport, MS

George LaCour earned his Eagle with an unusual, creative project that produced a local museum, Lynn Meadows Discovery Center, an ongoing exhibit of a near-threatened bird species, at the same time it supported classic Scouting themes of conservation, wildlife observation and education.

Sonja Gillis Lynn Meadows Discovery Center

(Continued on page 18)

Here and there 1.3





McLean, VA

As part of his Eagle Scout project, on October 22, 2016, Nate Shomaker, BSA Troop 128 in McLean, VA, and his fellow scouts and volunteers, completed construction on a 15' Chimney Swift Tower benefiting the Nature Center at River Bend Regional Park. The project was aided by the staff at River Bend Regional Park, Tart Lumber, Home Depot, Sun Belt Rental, FedEx Office, and McLean Hardware.

Nate Shomaker



Ohio

We have finished erecting our Chimney Swift tower at the Antwerp Local Schools new prairie park in N/W Ohio. I am in the final stages of building a second one to be placed at our home.

Gary and Linda Mabis



Chimney Swifts nesting in an outdoor alcove rather than inside a chimney or tower!



Membership and Publications Chimney Swift Conservation Association

Support our continuing Chimney Swift Conservation efforts by becoming a member at the following levels:

- Annual Individual	\$20
- Annual Family	\$35
- Tower Supporter	\$100
- Lifetime Member	\$500

Beginning in 2018, all new and renewing members will receive a CD containing all past issues of Chaetura and other Chimney Swift related materials.

The sale of publications and merchandise will also help us continue to maintain the web site and distribute educational materials.

For a list of publications and other merchandise, please visit us online at

www.ChimneySwifts.org

Thank you for your continuing support!

The Next Generation of Conservationists



Tannis Longmore is an educator at Stafford Elementary School in Stafford, Connecticut. Chimney Swift were included in the long list of species from the natural world to study in her after school program. As part of the class, the children created a web site to document their studies:

https://sites.google.com/a/stafford.k12.ct.us/creative-conservationists/home

Following are excerpts from their pages:

We are an after-school class of seven students in second, third, fourth and fifth grades at Stafford Elementary School in Stafford, Connecticut.

We are learning about how animals and people live together in our town.

A male and female Chimney Swift pair choose a chimney and build their nest together inside.

One day, we collected twigs outside and made nests similar to the nests Chimney Swifts make.

We found our twigs on the ground, but we wished we could break little twigs from trees as we flew by, the way Chimney Swifts do.

We spent several classes building a cut-away model of a chimney with clay swifts.

Usually swifts only have one nest in a chimney, though other adults may roost in a chimney along with a nesting pair. Most of us wanted our swifts to have a nest, though.

We sewed life-size finger puppets of Chimney Swifts. When we were sewing in the school courtyard, Jack and Kasie realized that felt would stick to the brick wall of our school – our puppets are almost like real Chimney Swifts!

The students created a fact sheet about what they now know about Chimney Swifts, as well as monitoring numbers of Chimney Swifts in active roosts. This program of engaging children with wildlife brings optimism for the future. We encourage you to enjoy their web site!! (ed.)







Using a Vocalization CD

An Eagle Scout constructed an artificial tower for his final project last summer. Can you recommend any specific times or months we can utilize audio recordings to attempt to entice pairs to nest in the tower this spring/summer?

John Michael Cassidy Naturalist / Metro Parks Shelby Bottoms Nature Park Nashville, TN

He should play the recording until he sees a swift actually enter the tower. Begin to play it around 10AM and observe the swifts behavior.....they will usually stay just above where the sound is coming from diving and searching for the source. Once they see a swift enter, they should shut it off. This may be all that's needed to get the pair interested in nesting. If they go unseen for more than a couple of hours, they should start the process over again.

Kelly Applegate

First, many thanks for getting the CD of swift vocalizations to me so quickly!! Now I have a question for you. There is a spectacular show, every 7-10 minutes of 3 to 5 (!!!) swifts appear over the tower, just hunting. Seems clear to me they are orienting around the sound, no reasonable doubt about it. From 7:30 to sunset we'll be monitoring every second. The question is, should we turn the sound off?? Maybe they are reluctant to enter a "live" breeding tower, but maybe that is a plus? All guesses appreciated!!! What is *entirely* clear is that your CD has jump-started the process of "selling" the tower!

- 1) 1 minute after turning on the vocalization, a swift appeared in the sky. Probably not a coincidence, but I didn't count that.
- 2) within a couple of minutes, 2 swifts, but I didn't count that. Neither showed any clear-cut recognition of the structure I'd built.

A couple of hours later, I wandered out, and there are 4 swifts (2 pairs, it looked like) in the vicinity of the tower. A minute or so of circling, then an amazing thing happened. They formed a (loose) line of 4, unmistakably a "formation" of some kind, and started directly toward the tower. One of them lost 30 feet RIGHT OVER the tower (no entry, but unmistakably checking it out).

So there's our answer: the CD literally called them out of the skies. You could hardly ask for a more dramatic answer.

Walter Stewart Bee Cave, TX

(Many thanks to Walter for recording and producing a good, clear vocalization tape with practically no background noise! ed.)

Justin Proctor, Edward Landi and I have been using playback recordings of Chimney Swifts near a roost (courtesy of John Gerwin) to lure Chimney Swifts flying past our Prairie Ridge tower to use it as a roost. Last year I noted on three occasions that swifts would swoop toward the chimney during their flyover if I played recordings on my smart phone, but none ever did more than that.

(Continued on page 21)

(Continued from page 20)

This year we decided to be on site each weekday evening during the second half of September, and to amplify the sound with speakers. At first the response was similar to last year, but this Monday while using two speakers situated outside the chimney, we enticed one bird to circle the chimney and eventually enter it. Within one minute it flew out of the chimney, but it returned and repeated its circling and entrance three times before finally flying off.

Tuesday night while using one speaker, several groups of birds circled the chimney and finally one group of three entered the chimney. Within one minute one flew out, but the other two remained until dark- thus the roost was established.

Last night while using two speakers, and as storm clouds approached, two small groups of birds circled and entered the chimney. We counted a total of twelve swifts. Fifteen minutes later a group of more than thirty swifts began swirling above the chimney. These were birds that arrived from the east-birds that had already flown past our chimney toward their traditional roost chimney several blocks away. They circled for ten minutes with small groups entering during that time.

By the time it got dark upwards of fifty swifts had entered the roost. When

Justin and I retrieved our speakers and began walking away from the chimney about a dozen swifts emerged from the chimney and flew east toward the traditional roost.

I realized I hadn't turned off my speaker- so maybe that upset these swifts. The rest stayed put. So looks like we had between thirty-five to forty swifts in our roost last night.

John Connors Director Emeritus North Carolina Museum of Natural Sciences

http://naturalsciences.org



Chimney Swift Tower at Prairie Ridge Preserve



Chimney Swift Vocalization CD

Some tower builders report excellent results using recorded swift vocalizations to draw nesting birds into new towers.

This recording was made by Walter Stewart at Travis Audubon's Chaetura Canyon Sanctuary in Travis County, Texas at the peak of nesting season where a communal roost was forming in the evening. The recording was filtered to produce clear Chimney Swift vocalization.

For suggestions on how to use this CD, please refer to the excellent article by Kelly Applegate on page 9 of the 2010 issue of Chaetura and the previous article in this issue.

To order a copy of the CD, please visit our online store at:

www.ChimneySwifts.org

QUESTIONS AND ANSWERS...



I came across your article online about Chimney Swifts. I believe I have a nest in my fireplace for about a month now. My chimney cap was either removed by my roofing company or flew off during a north Texas rain storm. So I have called a chimney sweep in the Fort Worth area and told them of my concern. They said they could not remove them unless the nests are free of eggs and the adults are away from the nest. I assume I have helped birth a couple of groups of babies in the last month. But the adults will not stop returning to my chimney. Do they really stay in the chimney until cold weather in the Fall? Which may be in November in Texas. If it does not rain this summer and the birds are eating mosquitoes in the area, I do not mind waiting awhile to cap the chimney. However, there are two things that bother me. One is what the chimney sweep company told me on the phone and what is posted on their website. They said, "They have been doing this for 35 years and those birds are pests." Can you recommend a chimney sweep in the Fort Worth area that will work with me on what to do about my situation with these birds and still respect my efforts in helping this species?

Cheryl

Thanks for your message. The first broods of Chimney Swifts are just now fledging, so you have certainly helped one family raise their young in a safe location. Congratulations! These birds need all the help they can get.

Some Chimney Swift families will stay together in the nest chimney until migration in October. More often they will leave the chimney to join a communal roost soon after the babies fledge in the summer.

Unfortunately we do not personally know of any reputable chimney cleaning companies in your area. Some companies will still illegally remove the nests and destroy the young. When selecting a sweep, you should avoid any who advertise "bird removal". Disturbing nesting Chimney Swifts is a violation of federal and state laws.

You might contact the Fort Worth Fire Department for a recommendation. Many firefighters also have chimney cleaning companies as a second job, and they tend to be the most reliable.

A question came to mind. You listed the number of eggs per nest and also the number that fledged from that same nest. I was wondering how you were able to view the eggs? I noticed right now that an adult is sitting on the nest all day long, so there is no real opportunity to look into the nest. Do you have cameras on all nests? I don't want to do anything to disturb the parents.

Glenn

Currently, there are only cameras in three of the 18 towers on the sanctuary. We have been using inexpensive "bullet" or "lipstick" black and white surveillance cameras. Black and white cameras are normally more sensitive in low light conditions within the towers. We recommend against cameras with infrared emitters because most equipment that is available off the shelf emits a visible red light that the swifts can see. It can frighten them out of the tower. So bottom line: use black and white and look for one that has the best sensitivity to low light.

However, there is no need to disturb the birds to know what happened during a nesting season. The number of eggs laid, hatched and fledged is determined by going through the detritus and guano in the bottom of the tower after the birds have migrated south.

(Continued on page 23)

(Continued from page 22)

Chimney Swifts do not carry off the egg shells the way passerines do, so everything from the nesting season is still in the tower after they leave for the winter. Broken eggs look different from those that hatched. The edges of the hatched egg sections will have a distinctive saw-tooth appearance. Fallen eggs will usually still be connected at some point along the break. It is also not unusual for an intact egg to be found on the tower floor. Swifts begin laying eggs long before the nest is complete, and early in the season, breeders may misjudge a movement that sends an egg over the edge or the egg may be infertile. Sadly, the remains of babies that did not survive can be also found. We excavate through the detritus using a putty knife and chip away bits of the droppings looking for clues - much like an archeological dig. Once done, the guano is added to the compost pile.

I am currently stationed at Ft. Bragg, NC, and a nearby state park (http://www.ncparks.gov/carvers-creek-state-park) has nesting Chimney Swifts. The house with the chimneys they use has suffered damage from water infiltrating the chimneys, so the state park system is having them capped.

The park superintendent wants to construct a tower for the swifts and I purchased a copy of your book for the park to use. I think a few dozen (my estimates are usually low) swifts use the park for nesting, but in the fall at least one hundred use the chimneys as a roost site.

What do you think the minimum size of a tower is needed for a roost used by a hundred (maybe several hundred) Chimney Swifts? Also will the park need more than one tower to mitigate the loss of three chimneys?

Mike

The cinder block "Castle" design in our book (page 69) has hosted as many as 500 swifts. It would seem ideal for your situation.

Please remember that there will be only one active nesting pair per year in any structure regardless of the size. If you want to mitigate the loss of the chimneys, we would advise building the same number of towers as were on the house where the chimneys are being used. An ideal plan would be to start with the larger roosting tower, and then build smaller "satellite" towers no closer than 12' to the large roosting structure.

I am a chimney sweep certified by the Chimney Safety Institute of America. As a certified sweep, I refuse to do anything that would disrupt a chimney swift nest inside a chimney.

Today I had a situation where I refused to service a customer where birds were in the fireplace smoke chamber. I decided to call the Greenville, SC Animal Control office. I was aghast to hear the recommendation that they gave. I called them as a homeowner to get their advice so I would know what they would say to my customers. They said call a chimney service company to remove them and their nest. There is not one of the certified sweeps that I know in the upstate that would do that!

This statement came from the person at Greenville Animal Control, Greenville, SC. Is there anything I can do to insure that a government office is not giving out such bad advice?

Wes

Top Hat Chimney Service

Thanks so much for your message. It is so frustrating that there are still government entities that are unaware of the wildlife laws.

(Continued on page 24)

(Continued from page 23)

We would suggest that you contact the SC Department of Natural Resources and explain the situation to them. Here is a link to the law-enforcement page on their web site: http://www.dnr.sc.gov/law.html

Hopefully they are more knowledgeable, will contact Animal Control and correct the situation. If not, here is a link to the U.S. Fish and Wildlife Service for your region: https://www.fws.gov/southeast/law/

When the nest or birds have fallen below the damper or smoke shelf into the fireplace, there are some things that can be done to help the birds and the homeowners. Basically the birds just need to be replaced above the smoke self where the parents can continue to feed them. Here is a link that may be helpful to you and your customers in the future: http://chimneyswifts.org/page30.html

We really appreciate your concern and professionalism. Things have really changed in the Chimney Sweeping trade in the 30+ years we have been working with Chimney Swifts. Today professional sweeps have become strong allies in Chimney Swift conservation – that was not always the case.

I recall reading a very vivid description of how a swift or pair of swifts investigates a new nesting site to determine if it fits their needs. We have a new tower just built last year and we are hoping to have a nesting pair this year.

Ginny Coburn

The passage Ginny was referring to is from the book Chimney Swift Towers:

"Individuals who construct new Chimney Swift habitat may have the opportunity to witness a unique behavior. A new tower will usually be discovered by a single swift. The bird will utter very loud, continuous, excited chippering while inspecting the structure. Beginning at the top of the tower, the swift will make passes from every conceivable angle; stall over the top and peer inside. It will then make fly-bys lower and lower until skimming a mere two feet from the ground, still vocalizing and approaching each side of the structure from different directions. Following the exterior inspection, the bird will circle above the tower, raise its wings and disappear inside. The tower will be inspected, approved and claimed in less than five frenetic minutes.

In instances where we have had the privilege to observe this behavior, the swifts have appeared to be totally oblivious to our presence. Their entire focus was on the tower as a potential "home". Like a child on Christmas morning discovering a very special gift, their enthusiasm literally explodes.

Remarkably, this behavior is only displayed once. A soon as a tower has been discovered, it enters into the neighborhood registry. Occupants will change over the years, but the excited display of the original discovery will {likely} never be repeated."

(Continued on page 25)



Photo courtesy of Jose Rodriguez

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/

(Continued from page 24)

For the past 25 years or more, several thousand Swifts have been living in a chimney on our property. The chimney is deteriorating due to weather and we wish to lessen the aperture from 6' x 6' to something more like 2' x 2'. We hope do so without disturbing the population.

Morgan Lidster

Large roosting sites like yours are extremely important to migrating swifts. We see no problem with reducing the opening of your chimney, especially since it will preserve it for the Chimney Swifts. The 2' X 2' should provide good access and because this is an historical site, the swifts will not likely be dissuaded from using your chimney.

Vaux's Swifts: Historic Root Site Discovered



Vaux's Swift Roost in Guatemala

I received a link to a swift study from fellow swift researcher Christopher Grooms, a Research Technician for the Paleo-ecological Environmental Assessment and Research Lab at Queens University in Ontario. His two recently papers published looked at what kind of arthropods Chimney and Vaux's Swifts have been eating through the years as evidenced by examination of their "guano".

Chris had found a 1938 German article about a swift roost chimney in Guatemala that was part of a sugar plantation near the Pacific Coast on the sloops of 12,000 foot Volcano Fuego. According to a 1928 German paper, swifts first show up by the end of December and the number builds up slowly to 20,000. They all roosted in a 6 meter tall, 1 meter wide chimney, appearing ½ hour before sunset and taking more then 10 minutes to get inside. Most have left in March. This old sugar plantation now growing coffee and Quinine Trees has a name, Finca El Zapote. The estate is thriving. What's chances that old chimney is still standing and attracting swifts?

I sent them an email asking that question. They replied that he chimney still stands and still has swifts. He'll be looking for them and sent us a nice photo of their roost.

Larry Schwitters, Vaux's Happening

For more information on Vaux's Swifts, visit Larry Schwitters' web site:

http://www.vauxhappening.org

For information on other swifts around the world, consider joining this Yahoo group:

https://groups.yahoo.com/neo/groups/Swallows-Martins-Swifts-Worldwide/info

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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 Lac-Édouard, QC - 2017

2016-2017 ANNUAL REPORT

For more than three and a half decades we have lived and breathed Chimney Swifts. They are literally responsible for who we are and where we are in our lives today.

As neophyte wildlife rehabilitators in 1982, we were introduced to our first Chimney Swift At that time there was no information available to guide us on how to feed, care for or house Chimney Swifts. So, our journey began.

With the help of veterinarian Dr. Katherine Van Winkle, microbiologist Betty Schushler and the Texas A&M University Avian Diagnostic Lab we developed an appropriate diet. We filled our home with incubators and mealworm colonies and experimented with different housing facilities until we ultimately constructed a large flight to accommodate these aerial imps. We then built two 22' tall towers on our home based loosely on the design of Althea Sherman's "Chimney Swift's Tower".

Banding permits and video cameras in the towers followed, and we began our long study of the life of these secretive birds. By the time we closed down our rehabilitation facilitates in 2000 due to health issues, we had handreared and released more than 1200 nestling and fledgling swifts and cared for many injured adults. Our care Guide "Rehabilitation and Conservation of Chimney Swifts" is still in print and details what we learned to do and what not to do in caring for these amazing creatures.

Along the way, we experimented with smaller designs for Chimney Swift towers. When we had our design "perfected", Texas A&M University of Texas Press published our two books about swifts to share this knowledge and hopefully encourage others to follow our lead in creating new habitat for the declining population of Chimney Swifts.

We have built dozens of towers, made dozens of presentations across the eastern half of North America, written uncounted articles and answered thousands of emails and phone calls (before there was email!) to spread the message of Chimney Swift conservation.

In 2006 we donated our home, surrounding eight acres (and 18 Chimney Swift Towers!) in the Central Texas Hill Country to the Travis Audubon Society to be maintained as a bird sanctuary and study site for Chimney Swifts in perpetuity. We are now "retired" from our 9 to 5 jobs and reside on the Chaetura Canyon Sanctuary as lifetime Stewards.

This 21st edited volume of "Chaetura", will be our final one. However, our work and the www.ChimneySwift.org web site will continue into the foreseeable future. Thank you for your past and hopefully continuing support of Chimney Swift conservation!

Sincerely,

Georgean and Paul Kyle Project Directors

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www.ChimneySwifts.org

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- download past issues of Chaetura
- order publications and merchandise
- Become a Conservation Partner with a Membership in the Chimney Swift Conservation Association

Send your e-mail to Kyle@ChimneySwifts.org

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Page 28 Winter 2018 Chaetura