



# "SWALLOWED" IN KENT!





### Swallows in Kent, CT

Few people know what a swallow is or how to identify them, let alone how many swallow species there are in Kent. The purpose of our project was to raise awareness about swallow species and a swallow-like species, the Chimney Swift. One of these species, the Purple Martin are of Special Concern in Connecticut.

Swallows, in the family known as Hirundinidae, are passerine birds with a small to medium body and long, pointed wings. They are expert aerial insectivores. They have short thick necks, small legs and feet, and a broad, flat, small beak. Members of this family range from solitary to highly colonial in nature. There is also a swallow-like species called the Chimney Swift which people often misidentify as swallows. These birds nest in chimneys and are also mistaken for bats and killed when they accidentally become trapped inside a house. Swifts are in the family **Apodidae.** They have smaller pointed wings than swallows and are aerial insectivores. In the air they look like flying cigars (Birds of the World). Educating the public about the birds in their backyard is an important first step in helping to ensure the survival of these birds as well as many other avian species.

### Study Objectives

This observational study and education project had four objectives:

- Objective 1: To educate the community about the three common swallow species and one swallow-like species found in Kent via an online storymap.
  - Barn Swallows
- Tree Swallows
- Purple Martins
- Chimney Swift
- Objective 2: To highlight how the community might be able to attract and/or help swallow and swift species on their property.
- Objective 3: To create an interactive storymap, using our observations, along with observations from eBird, to encourage people to learn about these birds and then go out and discover these species in
- Objective 4: To create an educational sign to put up at one of the Kent Land Trust's Purple Martin colonies about the Martins and the state's color banding project.
- Objective 5: To monitor nesting sites and the birds' populations in Kent

# Meet our Study Subjects



Female **Tree Swallow** (Tachycineta bicolor)

**Purple Martins** 

Male & Female Female **Barn Swallow** 

Male & Female **Chimney Swift** (Hirundo rustica) (Chaetura pelagica)

Images A - P: (A) Photographing adult Tree Swallow feeding young (B) A picture of me photographing a close up of a Tree Swallow nest in a nest box (C) Banding baby Purple Martins (D) Close up of an adult male Tree

Picture of Brennan taking a close up of Purple Martin nest inside of a gourd. (I) A picture of three Purple Martin young and one egg in a nest (J) Close up picture of a young fledgling Purple Martin (K) Picture of an adult

#### Study Sites

This study took place during the summer of 2020 in the town of Kent in the northwest corner of Connecticut. Because of the restrictions on communal travel, due to the pandemic, our field work was limited to the following locations where I was easily able to meet my project partner.

- Marvelwood School Campus (N41.78196, W-73.45675)
- Kent Center School (near my house) (N41.72407, W-73.48202)
- Kent Land Trust South Preserve (N41.77785, W-73.46161)
- Purple Martin colonies in and near Kent\*

\*Note: When I was unable to assist my community partner due to Covid 19 restrictions, my partner collected data from the other purple martin nesting colonies in the area for me.

#### **Tree and Barn Swallow Studies**

- We found active nests and then observed the nests throughout their breeding season. We also took photos of each species.
- We used the Epicollect 5 data collection App to record our observations and Google Maps to help record our findings. We also used observations from eBird to help identify locations where people could go to observe these species (see Figure 1).

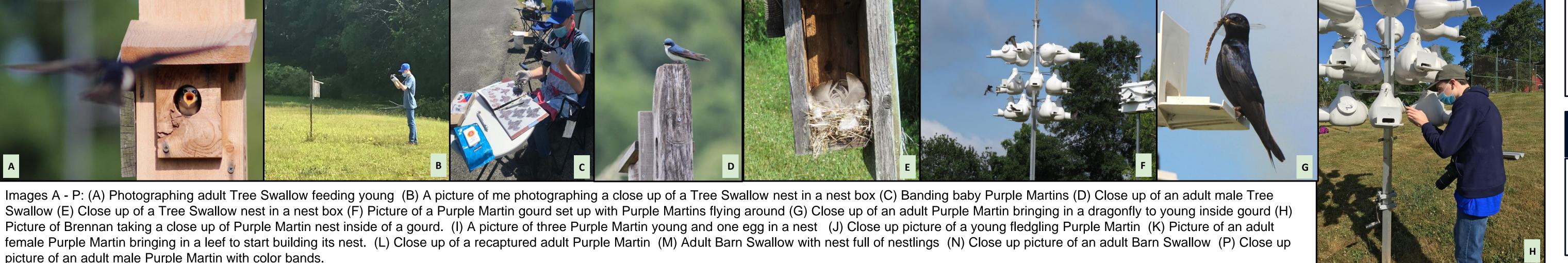
# **Purple Martin Studies**

- We studied known purple martin colonies in and and near the town actively managed by Marvelwood School and/or Kent Land Trust. We did nest checks and took photos at each colony to look for adults with color bands to track natal dispersal.
- We also color banded nestlings to help the CT DEEP with their natal dispersal study. Color banding helped to keep track of nestlings birth colonies and then track their natal dispersal when they returned to the area to breed the following year as sub adults.
- We produced an Epicollect 5 Data sheet and map of all the Purple martin colonies managed by Marvelwood School and Kent Land Trust in or near Kent, CT and used this to create a Google Map of the colonies.
- We created an information sign about Marvelwood School and Kent Land Trust's involvement in the state's natal dispersal study of Purple Martins which will be installed near one of the colonies to help educate the public.



# **Chimney Swift Studies**

- We studied an active roost of Chimney Swifts entering and exiting around dawn and dusk.
- We took pictures. video and acoustic recordings to document their presence.
- We used eBird Data to locate additional observations of Chimney Swifts to add to our maps.





- A map of known swallow and swift nesting and/or roost sites in the Kent area
- An interactive story map that allowed users to learn and listen to swallow & swift species
- Educational signage discussing Purple Martins and the color banding project was created for the Kent Land Trust to better inform visitors about purple martins at one of the colonies on their properties. (see example draft signage here)

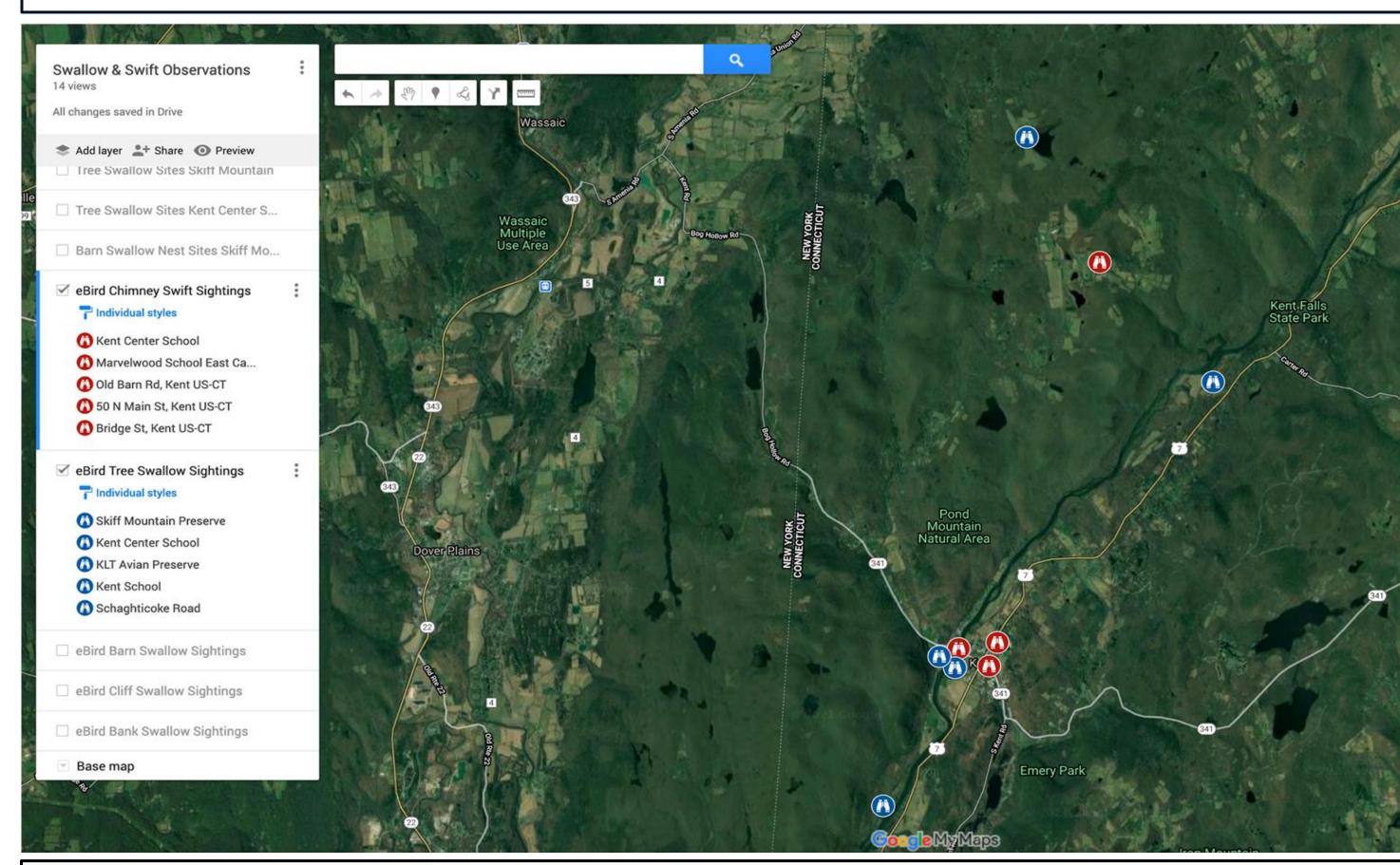


Figure 1: Example Map of eBird sightings of Tree Swallows (in Blue) and Chimney Swifts (in Red)



#### How to Be a Swallow & Swift Hero

- Community members could take the following actions to help these amazing species:
  - Put up Bluebird boxes in pairs, in a field near water. Tree Swallows will nest in one bluebird box and will allow bluebirds to nest in the other box.
  - Put up Purple Martin housing in near your house if you have suitable habitat (see story map) and have the time to manage the housing. o In areas with Barn Swallows make sure you have suitable structures for the birds to build their
  - Refrain from destroying habitat and/or nest sites including not capping chimneys and/or
  - leaving old snags on your property if they are not a safety concern Educate your neighbors about these species

#### References

- Birds of the World (S. M. Billerman, B. K. Keeney, P. G. Rodewald, and T. S. Schulenberg, Editors). Cornell Laboratory of Ornithology, Ithaca, NY, USA. <a href="https://birdsoftheworld.org/bow/home">https://birdsoftheworld.org/bow/home</a>
- Purple Martin Conservation Association. PMCA, www.purplemartin.org/



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<sup>1</sup>The Marvelwood School (Student/Faculty); <sup>2</sup> Kent Land Trust



picture of an adult male Purple Martin with color bands.



To learn more about swallows in Kent, visit our Story Map Link





