



Photo: Scott Carpenter

Vaux's Swifts in Portland

15 Years of Monitoring of Iconic Bird with Community Science



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What are swifts?

Swifts are **aerial insectivores** feeding on variety of aeroplankton: aphids, flies, plant hoppers, etc.

Vaux's Swift is smallest in North America, weighs about ½ ounce

They do almost everything “on the wing”: eat, drink, mate...

Swifts lack the ability to perch; instead they cling to vertical surfaces when roosting

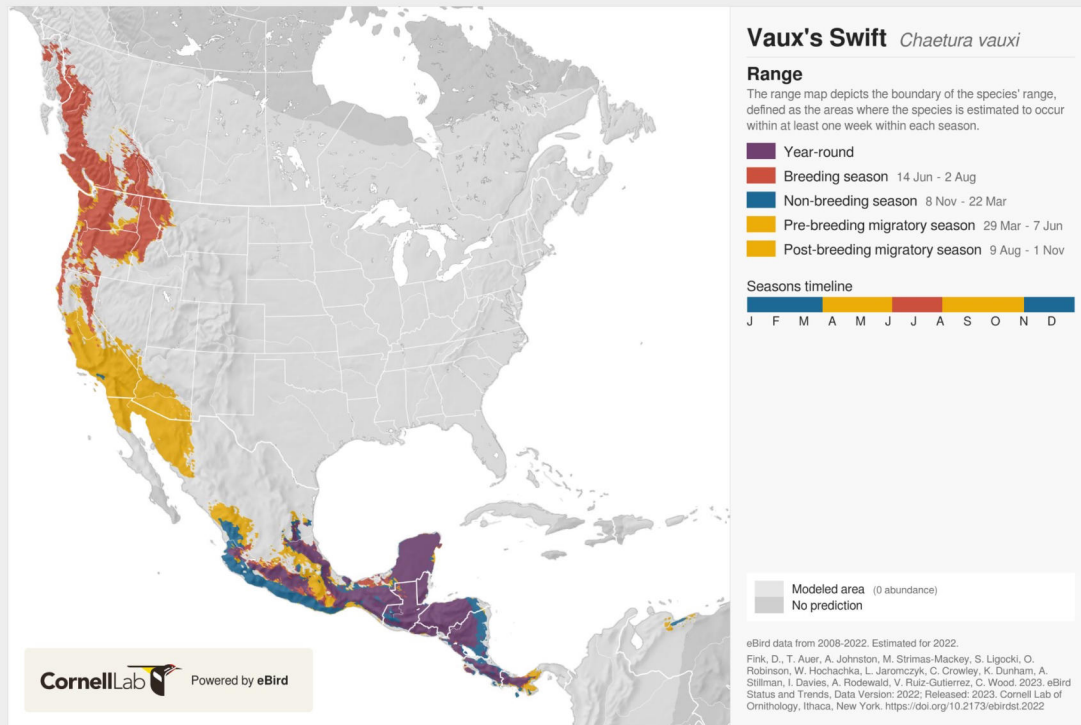


The Vaux's Swift

The most common swift across much of the PNW

Breeds from northern BC into northern California and winters from southern Mexico through Central America/Venezuela

In Portland, we have both nesting birds and through-migrants



Habitat

- Old-growth snags
- Old brick chimneys with exposed mortar joints
 - Both are threatened habitats!



Chapman Elementary School

- Major roost site during fall migration since late 1980s
- One of many sites in the area, but by far the largest in Portland metro
- Heating system replaced early 2000s
- Major chimney repair in 2020
- More than 3000 spectators regularly show up on a pleasant September night



Photo: Tara Lemezis

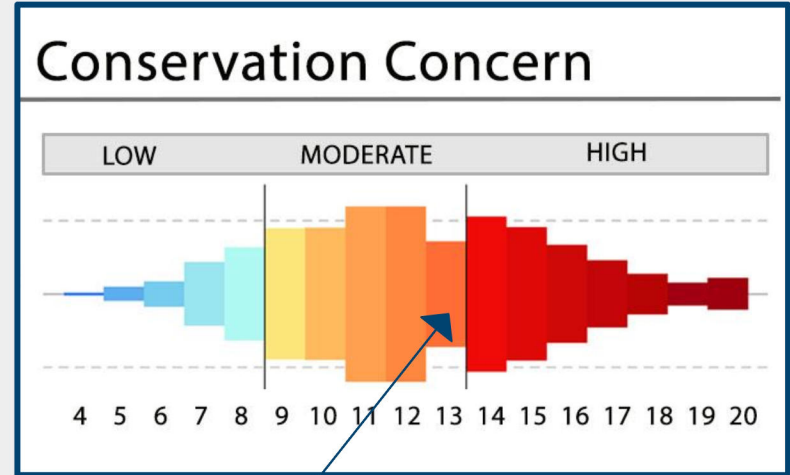


Photo: Karen Munday

Current status:

Vaux's Swift

- ~420,000 in North American breeding population
Continental Concern Score (CCS) = 13
- ~120,000 in Oregon breeding population
- Per BBS data between 1968 and 2016, Vaux's Swift numbers have declined by ~1.1% percent per year



Source: Partners In Flight

Vaux's Swift Counts: a Community Science Success

Community Science Project started in 2009.

Goals:

- Track local population trends
- Add to west-coast-wide database at Vaux's Happening
- Build skills and leverage passion of the community of swift aficionados!

Over 100 trained community scientists

- Nightly counts at Chapman from late August until the birds are gone
- Counts at other major roosts (>500 birds)
- Scouting of additional reported roosts in the metro area



Photo: Scott Carpenter

How do you count a tornado?

~~It's easy! Just count the wings and divide by 2!~~

Observer 1: clicker counter in one hand and binoculars trained on the Chimney, counts the birds as they enter, in blocks of 10

Observer 2: scribes the data, documents predation events and counts any groups of birds that do not roost



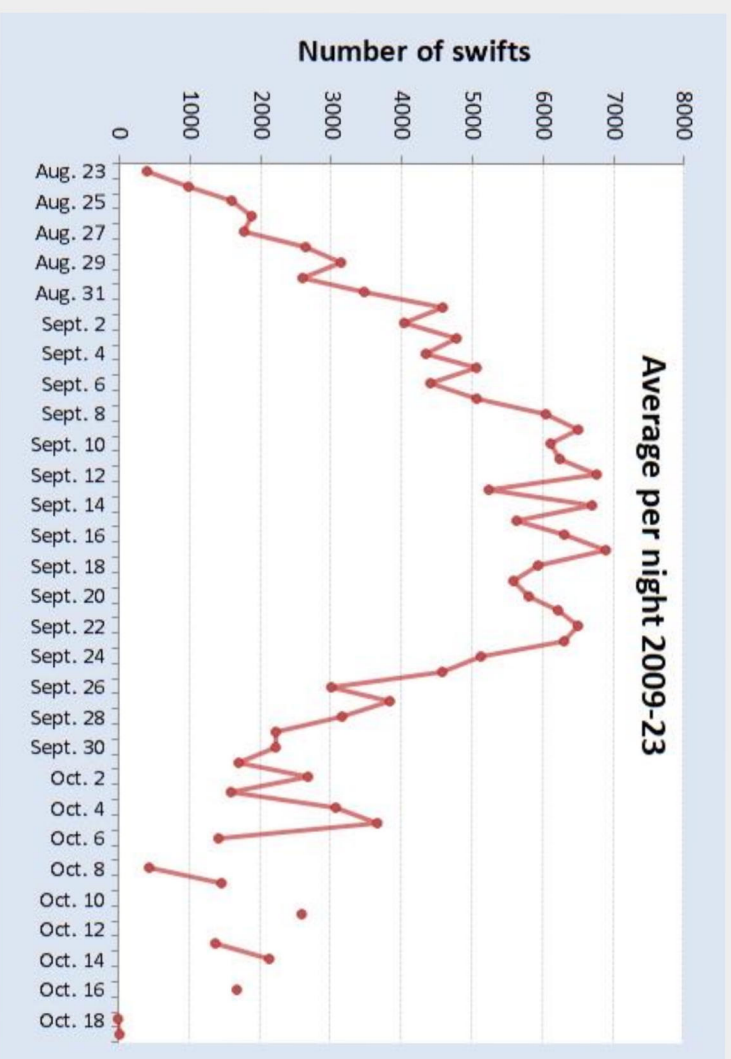
Fall Roosting Chronology at Chapman

Swifts start arriving ~4th week of August and continue to migrate through until early October

Numbers peak in mid-September

Weather probably drives a lot of the fluctuations in numbers throughout the season

Much more to learn about life history of Vaux's Swifts



Fall Roosting Population at Chapman

Trend at Chapman

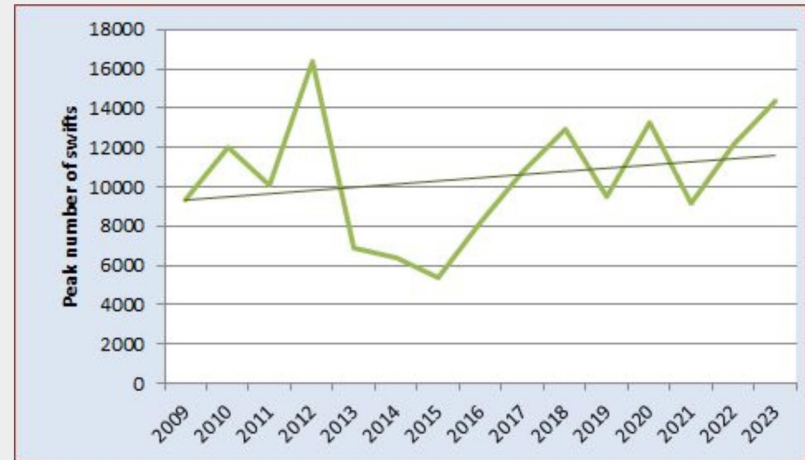
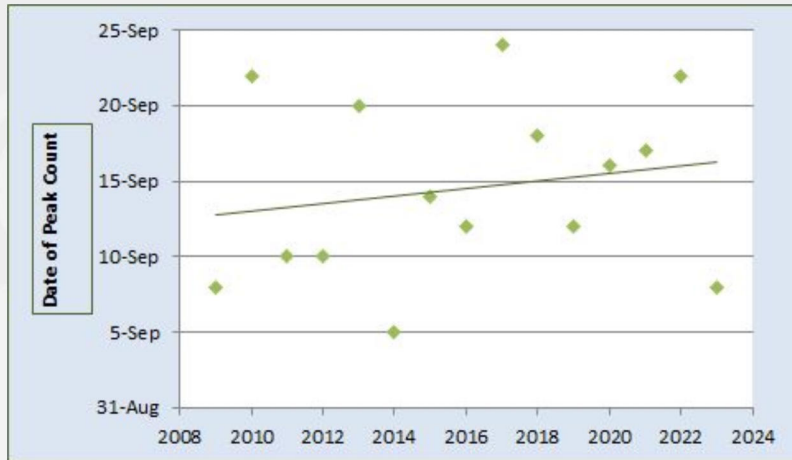
- 15-year average per-night count during 4 weeks of September is 5495
- Last year (2023) average was 5060
- Trend line is pretty flat



Fall Roosting Population at Chapman

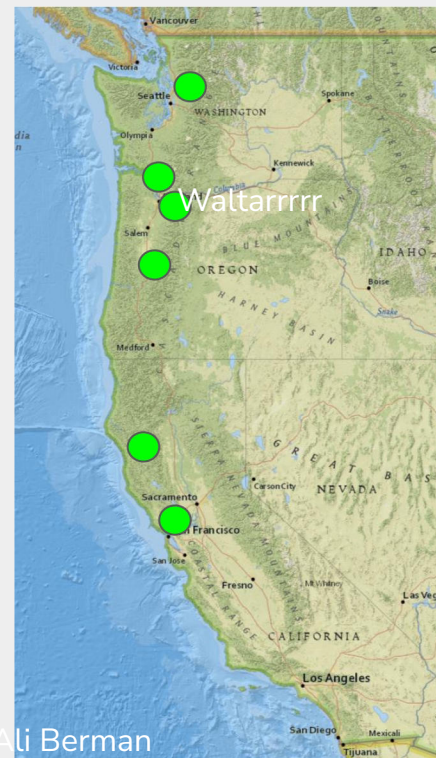
Trend at Chapman

- Peak is trending (mildly) later and greater
 - May indicate shift in migration timing
 - Is climate change a factor?



West Coast major roosts (peaks >5000)

- Washington
 - Wagner Elementary, Monroe
 - Selleck Schoolhouse, Selleck
- Oregon
 - Riverside Church, Rainier
 - Chapman Elementary, Portland
 - Agate Hall UO, Eugene
- California
 - Rio Lindo Academy, Healdsburg
 - McNear Brickyard, San Rafael



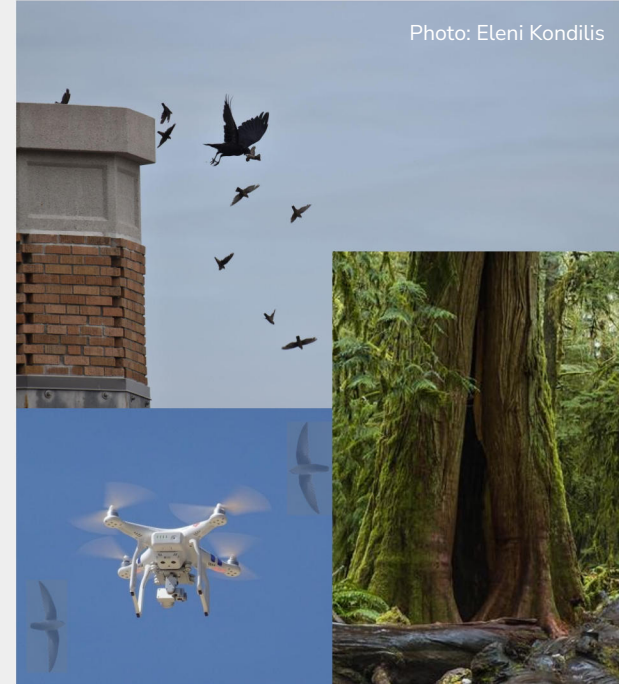
OR/WA peaks
September 4-7,
2023

CA peaks
September 20-21,
2023

Ali Berman

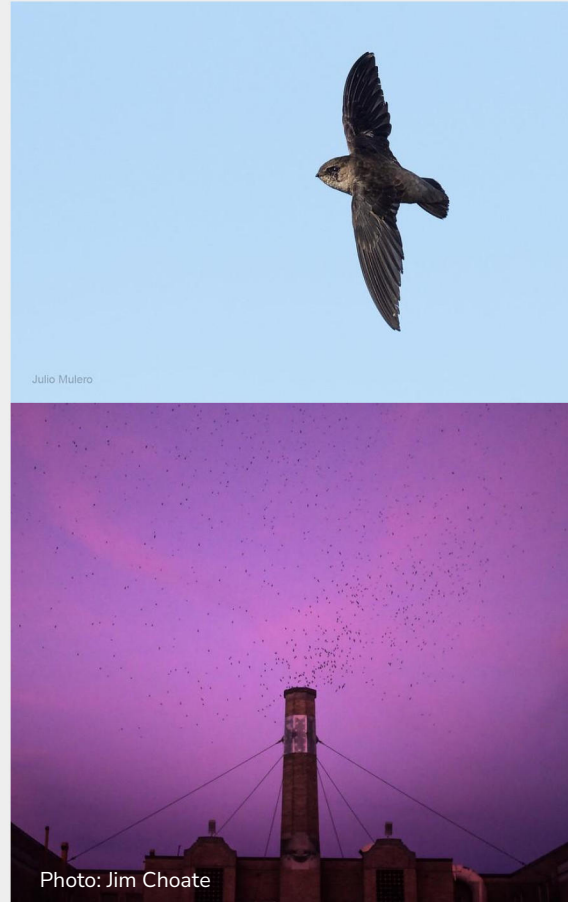
Threats

- Habitat Loss: large-diameter trees and old brick chimneys
- As insect populations suffer, so do insectivores
- Predation Pressure: Peregrine Falcon, Cooper's Hawk, American Crow
 - May delay nightly entry or morning exit
- Drones:
 - Can disrupts entry and cause stress to the birds
 - Violation of Airborne Hunting Act



Community Science Leverage

- Advocate for old-growth forest protections
 - Save large diameter trees
 - Support insect conservation
 - Save old brick chimneys
-
- Fall in love in September!
 - Let us know if you find a significant roost (>500 birds)
 - Join our community science team!



Julio Mulero

Photo: Jim Choate

Thank You!

- Portland Public Schools
- Portland Parks
- Larry Schwitters, Vaux's Happening
- All the BAO Swift Count Volunteers!