Providence Peregrines 2022 Updates from the Nest box

June 13

The third and fourth fledglings took their first flight from the rooftop this weekend on June 11 around 8:30 am and June 12 around 5:45 am! Viewers have enjoyed seeing a fledgling returning to the nestbox. Even though all four fledglings have technically taken their flights, it can take a few days for them to really start adventuring further and further around their parents' territory. So, although the nestbox (and birds' nests in general) are strictly nurseries, these birds are still young and the nestbox is familiar territory - it's not uncommon to see them return the first few days after taking flight.

It's always bittersweet to watch them go! We will be shutting the camera off for the season in the next day or two. Thank you to everyone who tuned in for the 2022 season, sent in their observations and pictures, donated in support of the live stream, and shared this live stream with friends and family! Your support, in all forms, is greatly appreciated.

If you haven't done so already, <u>sign up for Audubon's emails</u> so you won't miss the official 2023 Providence Peregrine nesting season announcement and consider <u>making a donation</u> to bring back the live stream next year!

In early August, the parents will encourage their young to move out and find their own territory. Peregrine Falcons are a migratory species and have been recorded to migrate up to about 8,000 miles. Many birds will stay in their urban territory year-round though, due to the abundance of food in these locations (namely pigeons.)

June 10

The third and fourth eyases left the nest box around the evening of June 9th - at around 4:10 pm and 7:10 pm, respectively.

June 8

The remaining nestlings have still not yet left the nest box; they have been testing their wings and can often be found perched on the ledge of the box. Even after their young take their first flights, the parents will continue to provide prey and flight lessons for the next couple of weeks.

<u>Viewer Question: How do the parent peregrines locate their fledglings once they take flight?</u> Answer: The juveniles stay in the family's territory while they are still learning to hunt, so they are never far. The parents will use the same incredible skills they possess for hunting purposes to keep track of their young - their keen eyesight and hearing. Want to watch the "flying lessons" that will take place this month? You can visit them yourself: the Providence Place Mall is close by, making it a great place to park (it's free for the first two hours.) Don't forget your binoculars!

June 6

The two fledglings took their first flights on June 6th and have been spotted on the live stream a couple of times since then.

June 3

We have zoomed the camera out today as one eyas, followed closely behind by a second, left the nest box and have begun exploring the rooftop! In just a few days, they will be learning to fly. The other two nestlings will soon follow behind their siblings, so keep watching! Fledging is a very dangerous time. Luckily, because the nestbox is so high up, the falcons that fledge from this spot are able to easily glide from this roof to the many lower roofs of buildings below them as they learn to fly with confidence. The parents may even stop feeding the fledglings in the next couple of days to encourage them to take their first flights. <u>Watch the June 3rd recap video!</u>

May 27

In their fourth week of life, the eyases undergo significant changes almost daily, making the age differences between the first and last to hatch in this brood clearly visible. The secondary (wing) feathers develop dark tips and the number of feathers visible on the breast increases noticeably as well. The area of feathers on their face expands in size each day. Within just a couple days during this period, the eyases will go from regularly resting on their tarsi (lower leg) to being able to stand and walk on their feet exclusively. Soon enough, all four chicks will be regularly opening their wings and running about the nest box! Watch the week four recap!

May 20

Banding Day (Part II) On Friday, May 20th, we banded four healthy baby peregrines (aka eyases): two males and two females! Watch our 2020 Party for the Peregrines interview with Master bander Joe Zbyrowski to learn more about Peregrine Falcon banding: https://youtu.be/vTX-ElcxUs8?t=1223.

How many and what kinds of leg bands do peregrines get and what do the codes mean? Peregrine Falcons banded in North America typically receive 2 leg bands-one on each leg. The first band is a U.S. Fish & Wildlife Service (USFWS) band which contains a number unique to that individual falcon (similar to a Social Security number). The numbers are small and hard to read unless you have the bird in hand. A second band is placed on the leg opposite of the USFWS band. This band is usually one or two colors and may have a few numbers and/or letters. This is done to increase the number of possible combinations of letters and numbers on these special color bands. These are made to be read from a distance, usually using a camera or spotting scope. Bird banding allows scientists to track the life history, migration and reproductive behavior of bird individuals and overall populations. The data that bird banding provides is increasingly valuable as we aim to better understand the climate and biodiversity crises.

<u>Do the leg bands hurt the falcons or affect the way they hunt?</u> The bands placed on peregrine falcons are a very lightweight aluminum material and are specially sized to fit a falcon's leg. They do not hurt the bird in any way and are comparable to a human wearing a bracelet. The leg bands do not interfere with flight or grasping of prey.

Banding Day (Part I) Sometime around 9:45 am -10 am today, we will begin the process of banding the young falcons. A board will be placed across the front of the nesting box to protect the falcons. Joe Zbyrowski, our bander, will remove the back opening of the box and remove the

falcons. The birds' sex will be determined based on the size of their legs and then two bands will be placed on one leg of each bird. The bird's legs have stopped growing at this point so the bands will never constrict their legs. The bands will help scientists identify where the birds were hatched, the year, and if they are male or female. The birds will then be placed back in the box, the front board removed and the process will be over. It takes a little over an hour to band four birds.

We have been banding the Peregrine Falcons in Providence since their re-introduction to Providence in 2000. Peregrine Falcons are a recovering species, nearly extinct in the United States due to the effects of DDT insecticide - and banding data has helped make recovery efforts successful!

May 12

<u>FAQ</u>: Where are the parent Peregrine Falcons?! All is well at the nest! As you can see from this picture from this morning, the eyases are growing quickly and are now too big for the adults to cover with their bodies. The eyases are brooded almost continuously for only around the first 10 days of life. Then, the eyases will huddle together until their adult feathers come in at around three weeks. Plus, it becomes pretty uncomfortable for the parent(s) to remain in the nest box at all times due to the increasing size of the eyases!

At this stage, it is completely normal for the parents of the eyases (chicks) to be absent from the nestbox. They are now spending most of their time hunting to feed their growing family, and they will really only return to feed their young. Rest assured: the parents are only seconds away if any predator approaches. After all, they are the fastest creature on the planet.

Contrary to what is commonly portrayed in cartoons, nests strictly provide a place for laying eggs and raising young until they fledge during the breeding season. Fledglings, juveniles and adult birds do not sleep in nests and many birds do not necessarily have a particular spot they return to each time they need to rest - the Peregrines are no different. They will perch and rest anywhere they please within their territory. Keep watching and hopefully you will be watching at just the right time to see the adults return to feed their young!

May 1

The fourth egg has hatched around 8:30 am! The eyases will grow fast - you can already see how much stronger the other hatchlings are compared to the newest member of the family. Each single day is important in terms of development for these young birds!

In about 21 days, their legs will be fully grown, allowing us to place bands on each nestling. Banding birds provides conservationists and biologists with important information about the species.

For 1-2 weeks after hatching, the nestlings are brooded almost constantly, usually by the female while the male hunts for food to feed the family. The female and male will switch places occasionally too! After this period, both adults will leave the nestbox in order to hunt enough food to feed the quickly growing eyases.

The eyases will fledge (leave the nest) around 38-45 days after hatching; timing depends on age, sex and physical condition of each chick.

April 30

The third egg has hatched sometime this morning. The fourth egg will be hatching soon!

April 29

HAPPY HATCH DAY! The first Providence Peregrine hatched sometime this morning - the first glimpse of it was seen at 8:30 am! The second egg hatched around 12:30 pm. Keep tuning in as the other three eggs will hatch throughout the weekend! <u>Watch the Video Highlight</u>

Look closely when the adult lifts their body up - can you see "pipping" holes in the remaining eggs? Pipping is what occurs when an egg is ready to hatch and the eyas first uses its beak to punch a small hole in the egg to allow it to breathe air. You will also see the female eating the eggshells in order to replace the nutrients needed to develop and lay the eggs one month ago.

April 7

The Peregrine Falcons have been diligently incubating the eggs and hunting for food; while one falcon broods over the nest (typically the female), the other will hunt to feed both itself and its partner. The incubation period lasts around 30-35 days. To predict a hatch date, we count 30–35 days from when the second-to-last egg was laid as this is usually when incubation fully begins. Can you tell the male from the female yet? Females are larger than males and the easiest time to see the difference is when they are at the nest box at the same time.

March 29

A fourth egg was spotted around 11:30 am when the adults exchanged nest duties. Reviewing the footage, it looks like the fourth egg was laid around 11:45 pm on March 28.

March 28

Livestream becomes publicly available. Due to technical difficulties, we were not able to get the stream publicly accessible until today – we apologize for the delay and are grateful for your patience and understanding.

Although we didn't have full access to the stream until today, we were fortunate that the live footage started recording on March 18, which was reviewed to create the timeline below.

Here's what you missed as we worked out the technical difficulties (<u>watch the video timeline</u> <u>here</u>):

March 26

4:40 pm: The third egg is laid.

March 25

Incubation seems to have begun since the adults (mainly the female) are seen on the nest "full-time."

March 24

12:30 pm: The second egg is laid.

March 22

9:05 am: The first egg is laid. The female is observed on the nest box ledge guarding the egg throughout the day. Incubation will not begin until the second-to-last egg is laid, which ensures all eggs will hatch around the same time. Once incubation starts, one of the adults will be sitting on the nest (with the exception of brief moments during warm weather or when the male and female need to exchange food.)

Sunday, March 21

7:16 am: The pair meet at the nest box to exchange food. This is yet another behavior that helps strengthen their bond.

8:07 am, 11:59 am: More bowing rituals. As egg-laying approaches, these moments increase in frequency.

4:15 pm: The male is seen digging the "scrape" (nesting area in the box) and the female arrives to partake in yet another bowing ritual. The female was observed spending most of the day at the nest box. These are all indicators that egg-laying is fast approaching!

Saturday, March 20

8:15 am: The male arrives at the nestbox, closely followed by the female and they partake in another bowing ritual.

6:26 pm: Another bowing ritual at the nest box. At this point, it is likely that mating has begun, as it takes approximately 48 hours for an egg to develop.

Saturday, March 19

5:00 am: Another bowing session is observed at the nest box. The rest of the day was very rainy, so there was no other activity.

Friday, March 18

1:30 pm: We attempted to gain access to the livestream. Although unsuccessful, we were able to turn the device's DVR on to begin recording live footage, which we would access once the system connection was restored.

4:50 pm: When reviewing the footage, we observed an unbanded pair of Peregrine Falcons meeting at the nest box to partake in a bowing courtship display. This is one of the mating rituals Peregrine Falcons undertake to form their bond. When away from the nest box, the pair is likely spending a lot of time flying around the city in close proximity to one another. This behavior is another form of bonding between mated pairs and can begin as early as January!

This year's pair is unbanded for the fifth year in a row - so it is impossible to confirm if they are the same pair from last year. However, the adult Peregrine Falcons that utilize this nest box

usually have enough year-round food in their territory, allowing them to stay in the state instead of migrating south each winter. This makes it likely that the 2022 birds that nested here last year.