

2014 Duke Farms Eagle Cam Updates

10/23/13

The eagle camera is now up and running! Staff at Duke Farms relocated the camera to the new nest tree so the view is closer and not obstructed by branches. The new nest is 80 feet off the ground and sits in a cluster of branches of a large sycamore tree. The adults have been seen working on the nest in the early morning hours.

11/25/13

The pair has been busy working on the nest. The best time to see them at the nest is early in the morning or later in the day.

In 2013 148 pairs of bald eagles were monitored and 177 young produced. The 2013 Bald Eagle Report has all the details on the 2013 NJ eagle nesting season.

12/6/13

Duke Farms banded bird re-sighted.

On December 1, 2013 Kevin Smith photographed a NJ banded bird at Conowingo Dam, Maryland. He was able to zoom in to view the green band which read C96. This bird had been banded on May 18, 2009 at Duke Farms. He was the oldest of three males raised by the pair in 2009 while being watched by eagle cam viewers. At 4 1/2 years old the bird is almost a mature adult but still has just a slight amount of brown in his tail feathers.

Conowingo Dam is a popular spot for eagles this time of year due to the abundance of fish. Kevin noted that the eagles were catching smaller fish than usual and eating them on the fly. The photo on the left shows C96 moving the fish from his talons to his bill. Keven reports that he (C96) would then circle back around looking for more fish and got his share of food that day. [Check out the CWF Blog for more information.](#)

http://www.conservewildlifenj.org/images/artinline_2185.jpg

http://www.conservewildlifenj.org/images/artinline_2186.jpg

1/2/14

Happy 2014! We are looking forward to another successful nesting season for the pair in 2014. The pair continues to be seen at the nest usually in the evening and early morning hours. They started incubation on February 14th last season so most likely they'll start incubating sometime around that date this year.

1/6/14

One of the adult eagles was seen working on the nest this afternoon and was later joined by the second adult for a short time.

http://www.conservewildlifenj.org/images/artinline_2198.jpg

1/24/14

Five NJ eagle pairs are already incubating. The earliest incubation start date for this season was January 12th.

The Duke Farms pair continue to ready the nest.

2/6/14

As the snow piled up in the nest the pair was probably perched in a location out of the weather as much as possible. This morning the pair was seen bringing sticks to the nest and arranging them.

Thirteen pairs of eagles are now incubating in New Jersey.

2/17/14

The first egg was laid today at ~4:00 p.m.

2/21/14

The second egg was laid yesterday afternoon. The third egg should be laid this weekend. Incubation begins when the first egg is laid and hatch in the same order as laid. In New Jersey incubation lasts around 35 days.

1st egg laid 2/17- possible hatch date 3/24

2nd egg laid 2/20- possible hatch date 3/27

Both the male and female share incubation duties. When they exchange incubation duties, then we get a view of the clutch of eggs. Join the conversation on our Facebook page!

The first NJ nest to hatch was confirmed on February 17th.

A total of 40 pairs of eagles are currently incubating in New Jersey.

2/24/14

The third egg was laid yesterday afternoon.

- **1st egg laid 2/17- possible hatch date 3/24**
- **2nd egg laid 2/20- possible hatch date 3/27**

- **3rd egg laid 2/23-possible hatch date 3/30**

3/14/14

Eagle Cam viewers are anxiously waiting for the first egg to hatch around the 24th.

The male and female share the incubation duties though the female does spend more time incubating. They both develop an incubation patch or brood patch. The brood patch is a bare spot on the breast or abdomen where the warm skin can be pressed against the eggs or young chicks to keep them warm. You will also notice that the eagles move very carefully around the eggs and often hold their talons closed so that they don't accidentally hurt the eggs with their sharp talons.

Currently in New Jersey 162 eagle pairs are being monitored by a dedicated group of volunteers. Ninety-six pairs incubating and 9 nests have already had hatching.

3/24/14

The first egg is due to hatch today. The eggs will hatch in the order in which they were laid. The hatching process can take 24 hours or more. The eaglets use their egg tooth (a pointed bump on the top of the beak) to break (called pipping) through the shell. The eaglet then continues to peck at the shell until it has a hole in the shell large enough to break through and free itself. A good way to tell if the egg is hatching is to watch the parent's behavior. They will be off the eggs and looking down at the eggs more than normal.

Initially, hatched eaglets will have a grayish-white down covering their bodies. The eaglet will not need to be fed right away since it has absorbed the yolk before hatching. When the adults feed the chick they will shred off pieces of meat from the prey and coax the eaglet to eat by putting the food in their beak. Feeding sessions will be the best time to see the new eaglet. A large portion of the time the chick will be under the adult being kept warm while the adult continues to incubate the other eggs.

3/29/14

8:00am: The first chick has hatched and another egg is in the process of hatching.

9:00 am: Second chick has hatched. Video of the second chick hatching

http://www.conservewildlifenj.org/images/artinline_2226.jpg

3/30/14

The adults have been busy bringing food back to the nest. The third egg has not hatched yet.

This screen shot at 3:30 shows the adult feeding the chicks. Notice the fish around the nest and a duck in the front. These chicks will not go hungry.

http://www.conservewildlifenj.org/images/artinline_2227.jpg

3/31/14

3:30 pm- The third egg has begun hatching. The two chicks have been fighting at feeding time. Sibling Rivalry is common among chicks, the first two hatched are close in age so there isn't a large size difference. The third chick will be at least two days younger and smaller and will be at the bottom of the pecking order. Younger chicks learn to wait until the older chicks get fed, the adults have been bringing plenty of food to the nest so lack of food won't be an issue.

4/1/2014

The third egg has hatched! http://www.conservewildlifenj.org/images/artinline_2234.jpg

4/2/2014

The three chicks waiting to be fed.

http://www.conservewildlifenj.org/images/artinline_2236.jpg

4/8/14

The two older chicks are about a week and a half old and youngest is one week old today. When they first hatched there was a lot of fighting among the chicks but we don't see too much of that anymore. All three chicks are getting plenty to eat and there is always extra fish in the nest. You can tell the chicks are getting bigger due to the fact that the adult can no longer keep all three completely covered. Eagle chicks grow rapidly adding one pound to their body weight every four or five days. It's hard to believe but at six weeks of age these little balls of fluff will be nearly as large as their parents.

http://www.conservewildlifenj.org/images/artinline_2241.jpg

4/15/14

All three chicks are doing well and getting their share of the food brought to the nest. Besides fish there has been a rabbit and turtle brought into the nest. Bald eagles main source of food is fish but they are opportunistic feeders and will get whatever is available and easiest to obtain including road kill.

The chicks are becoming more mobile and moving around the nest but today they are trying to stay dry and out of the rain by going under the adults. Adult eagles have 7,000 feathers. Layers of feathers trap air to insulate birds against cold and protect

them from the rain. You can see that the chicks are starting to get a slightly darker appearance. By the third week, the eaglets lose their baby down and regrow a secondary down which is a much darker, woolly gray. Their legs will also turn yellow. http://www.conservewildlifenj.org/images/artinline_2246.jpg

4/22/14

If you look closely you'll see that the two older chicks have feathers emerging along the edge of their wings. Pin feather is a term for newly forming feathers. As each feather develops, it is encased in a thin shaft of waxy keratin (like your fingernails), which will eventually fall off or be pulled off by the chicks this allows the new feather to unfurl and grow to its full size. The feathers will emerge beginning with the head, back and then the belly. For the next few weeks the chicks will have a mixture of down and feathers. By eight weeks of age they will be almost fully feathered

5/8/14

Nest Banding

The eaglets will be six weeks old next week and the banding team will visit the nest on May 12th at approximately 10a.m. (rain date May 14th)

ENSP Principal Zoologist, Mick Valent will climb the nest tree. Once Mick is in tied-in at

the nest, he will use a long pole with a hook to gently make the eaglets walk toward him.

He will then place a hood on their head to calm them down and vet wrap on their feet to keep

them from hurting themselves or one of the biologists. He will place one eaglet at a time in a duffel bag and lower it to the ground with a secure rope to the waiting banding team. Each eaglet will be lowered to the ground in this manner and returned when finished. Once the eaglet is on the ground it is weighed. Blood samples are taken from the bird; the blood sample will be tested for pesticides and other contaminants. Measurements are taken to determine the sex and age of the bird, although in this case, the age is already known by all webcam viewers. A leg band will be placed on each leg: a silver federal band with an individual, engraved number, and a green band signifying its origin. Since green bands are only used on NJ birds, they enable us to track where NJ birds are migrating, nesting and wintering.

A nest viewer question: Is DNA testing ever done on the blood samples to determine gender?

ENSP Principal Zoologist Kathy Clark responded: "No, we have not done DNA testing for gender, because we've reserved all the samples for analysis of organochlorine pesticides, PCBs, heavy metals and other contaminants that may

become a concern. More recent work on raptors has included looking for flame retardant chemicals that may be persistent in the environment. We still have most of our eagle samples in cold storage awaiting analysis because funding is unavailable. A few samples have been run by researchers working with wildlife rehabilitators (when contaminant toxicity is suspected in sick birds), and some of those tests have included gender identification of the bird. But for the most part, the measurements we take at the time of eaglet banding are sufficient to identify the sex of each bird."

If you have any questions about the banding please ask on the Eagle Cam interactive page: <http://www.conservewildlifenj.org/education/eaglecam/interaction>

5/13/14

Yesterday biologists banded and recorded data on the 3 eaglets. There are two males and one female. The chicks that hatched on the same day are a male (D/98) and female (E/00) and the youngest a male.

0709-01588 and green D/98 (left) is a male

0709-01589 and green D/99 (right) is a male (and youngest)

0709-01590 and green E/00 (right) is a female

To view recorded video of the banding from the ground based camera (complete with sound) go to this link: <http://www.ustream.tv/channel/Duke-Farms-Eagle-Banding>

6/4/14

The eaglets are now nine weeks old. They are walking around the nest and stretching and flapping their wings and also starting to eat on their own. They are starting to strengthen their wings in preparation for their first flight. They will also start to "branch" which means they'll walk out onto branches to perch. So far chicks have fledged (taken their first flight) at seven nests in New Jersey.

6/9/14

Unfortunately the eagle cam is not functioning properly. Duke Farms staff went out to assess the problem and determined the issue was at the nest tree. They will not be able to approach the tree to fix the issue until the chicks have fledged. We will keep you updated as we get reports on the chicks from

8/25/14

On July 27th the juvenile male, D-98, was found dead by residents of Little Sebago Lake, Maine. He was one of the three Duke Farms chicks banded on May 14, 2014 and assumed fledged in Mid-June.

Residents of the lake which is NW of Portland, reported seeing him near an active eagle nest located on the lake. The nest had chicks which fledged in early July. On July 25th residents reported seeing a juvenile with a green band sitting in a tree near a boat house;

“The youngster had been in a small tree next to our boat house for quite a long time when an adult, carrying a fish, swooped in over the folks sunning on the beach and attacked the young bird. It dropped the fish in the process. The adult flew off leaving the fish and the juvenile behind. Thanks to a cell phone photo, we know that the youngster had the band colors of the later retrieved juvenile”.

While we don't know for certain we can assume that the juvenile's death was in some part due to injuries that occurred when it was attacked by the adult. The mortality rate for first year eagles is fairly high as they are still learning to hunt and fly. It is very unusual to receive this much information on the details surrounding an eagles death.

10/20/14

Update from Duke Farms:

"We have pulled down the eagle camera and found out the main issue currently appears to be a corroded connector. We will be cleaning/replacing the connectors and run tests and hopefully have the camera up soon again."