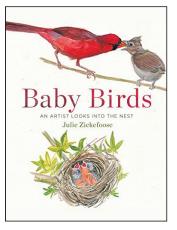
## **Parenting Young Birds**

By September most young birds have fledged and no longer visit their nests. They have learned from their parents to find food and to avoid predators, which means that they have acquired the compulsive behavior of looking for food while constantly staying alert. In addition to these challenging survival behaviors, they soon must become strong enough and quick-witted enough to migrate to their winter homes for the first time. The timing of the raising of young birds is crucial to their survival.



In this regard, a new book, Baby Birds, An Artist Looks into The Nest by Julie Zickefoose, is a marvel. She paints seventeen species of infant birds and follows their growth day by day, sometimes painting several poses in the same day as the first feathers appear. Along with the sequences of paintings for the seventeen species, she muses on the natural history of particular species.

Of the seventeen species, fifteen nest in Newton. (Only the Prothonotary Warbler and the Indigo Bunting are not Newton nesters.) All of the birds are protected under the Migratory Bird Treaty Act that was signed by Canada, Mexico, Japan, Russia and the United States. It was originally signed in 1918 by the United States and Great Britain for Canada. Later amendments added the other three countries. (House Sparrows and European Starlings are not protected under this act.) Julie has both federal and Ohio state permits to handle migratory birds.

The first bird in the book is the Carolina Wren. Our Carolina Wrens took a big hit during the severe winter two years ago. But if you listen for their song, you can hear that a comeback is occurring this year. Looking through Julie's sequence of paintings over the thirteen days from hatching to fledging gives you a very close feel for Carolina Wren childhood and parenthood.



Eastern Bluebird

for twelve days and had to stop because she was scheduled

to lead a group of National Audubon Society campers on a birding walk on Hog Island, Maine. She completed the Eastern Bluebird paintings from another nest in 2013. The bluebirds take about three weeks to fledge, according to the *Birds of North America Online* web site of the Cornell Lab of Ornithology. Thus, they are slower than the wrens to mature.





Tree Swallows

The third species in Julie's book is the Tree Swallow. This species nests in Nahanton Park. (They were the main focus of my article "The Tree Swallows of Nahanton Park" in the summer 2015 issue of this newsletter. Julie's sustained and close observations are at a much deeper level than the article a year ago.) She comments on the first flight of these graceful birds with their small feet. Their first flight out of the nest box must carry them to a safe perch because they are not comfortable on the ground at first. As a result of their discomfort on the ground, this first flight of the young birds turns into a surprisingly strong one.

Later in the summer, when large flocks of more mature Tree Swallows gather together to migrate, you do see groups of them sitting on the sand along the shore.

All three of these species feed their young on protein-rich insects as soon as the chicks can handle that sort of food. There is instinctive knowledge that the chicks must mature soon enough to survive and migrate, if that is also a need. Any species that survives primarily by eating insects must get out of New England during our winters. Cathi Gilmore took the photo of the Tree Swallow feeding its chick, above.

In reading her book, one admires the scope of Zickefoose's work and the persistence and patience required to complete it.

One of Julie Zickefoose's later revelations surprised me. I had heard of crop milk, a secretion from the lining of the pouch near the throat that is regurgitated to young birds, but had not realized that young Mourning Doves grow very fast on this rich diet without any protein from insects. Both male and female parent Mourning Doves undergo an incredible change in the lining of their stomachs when their

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In Julie's description of this

series of paintings of the wrens, she writes about the development of the Eastern

Bluebirds that she painted

The Eastern Bluebirds are

the second species in her

book. She painted them

simultaneously in 2002.

eggs are ready to hatch: the lining thickens, and glands in the lining begin to produce a rich milk. Males too! In this way, the vegetarian parents produce milk that provides rich protein. Julie notes that the baby Mourning Doves have a faster growth than even the smaller, insect-fed Carolina Wrens. If you Google "Mourning Dove feeding crop milk to chicks" on You Tube, you can watch it happen.

These doves may have ancestral dinosaurs that produced crop milk. This speculation by experts may be one of the amazing features that evolution has produced.

I watched a completely different mother bird feed her airborne youngster in July of this year. The birds involved



Northern Harrier with food for her young

are Northern
Harriers, which
we called "marsh
hawks" years ago.
They nest on
or close to the
ground in open
wet, marshy areas.
One such area
lies along the
west bank of the
Charles River.

which we can view from the Helen Heyn Riverway trail south of Nahanton Street. (If you go online to eBird and explore the species maps under the "Explore Data" menu, you can find dated reports of Northern Harriers along this stretch of the Charles River.) Four of us were watching three of these hawks, guessing that we were looking at a hen and two young birds. The hen flew off, away from us. When she returned, one of the young birds flew up to her, and she deftly dropped a rodent, which the young bird caught and took back to the marsh.



Northern Harrier feeding young airborne

Once at the marsh, the hawk with the rodent was challenged by its sibling, who wanted the free lunch. The sibling was rebuffed, and the first young bird settled into the marsh

to dine. The event is captured in the incredible Lanny McDowell photos pictured to left and above.

Even these large raptors have to elude predators such as raccoons, skunks, foxes, coyotes and our own dogs and cats around their ground-hugging nests. I can't offer anything close to Julie Zickefoose's detailed studies of other birds, but this vignette, which took all of five minutes to play out, was a contact with nature that stays with me.

Such moments can't be planned. Newton has great places for all of us to visit. It is in these green spaces in our city that you will have such experiences. Take some time, un-plan that time, and use it to wander through one of our open areas.

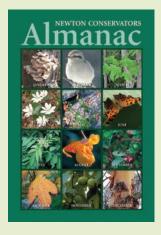
**Note:** The Helen Heyn Riverway Trail referred to above is in the Newton Conservator's Guide to walks in Newton (*Walking Trails in Newton's Park and Conservation Lands*; See http://www.newtonconservators.org/parkmap.htm) and is featured in the following article by Mike Clarke.

« Pete Gilmore

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