

# NABS Factsheet

## Eastern Bluebird Nestling Growth Chart

There are many reasons that a bluebird trail manager wants to know the age of the chicks in a nestbox. For example, it is inadvisable to open a nestbox for routine monitoring after the chicks are 12 – 13 days old due to the risk of premature fledging. Likewise, bird banders need to know the age of the chicks before banding. This chart can be used to estimate the age of Eastern Bluebird (EABL) nestlings. Typically, EABL young hatch about 14 days (13 – 15 days) after the female starts incubating the clutch. If one counts the day of hatching as “Day 0” then one can expect the birds to fledge (i.e., leave the nest) on Day 16 – 17. (Rarely early as 15 or late as 18 days) This chart shows the typical appearance of EABL nestlings from Day 0 to Day 15. There is a brief description of the nestling’s appearance provided for each day. No “in-hand” image of “Day 0” nestling was attempted for this photo series. Please note these images were obtained by a scientist who had obtained the federal and state permits allowing her to handle wild birds. Handling of wild bird nestlings without such permits is a violation of Federal regulations and should not be attempted. It should also be noted that these images show nestlings apparently receiving adequate nutrition from the parents and developing at a normal rate. Under less ideal conditions (wetness, drought, or cold) a shortage of insects could result in poorer nutrition and possibly retard nestling development.



**DAY 0 (hatch day):** coral-pink skin; eyes sealed shut; sparse, downy tufts that may appear moist; wings are naked nubs; unhatched eggs may be present.



**DAY 1:** Downy tufts along the head, spine, and wing; floppy necks.



**DAY 2:** Downy tufts still apparent; beginning to see dark pin feathers forming along the trailing edge of the wing.



**DAY 3:** Pin feathers are evident in the wing; and beginning to develop along the spine and the top of the thigh; the ear openings are noticeable.



**DAY 4:** Pin feather tips begin to emerge from the wing; pin feathers are visible along the spine and top of the thigh.



**DAY 5:** All feather tracts are visible; pin feather tips begin to emerge from the head, wing, and thigh; tail feathers begin to emerge.



**DAY 6:** Feather sheaths are evident on the wing; pin feathers tips begin to emerge from the spine, lower leg, and the area surrounding the chest and abdomen.



**DAY 7:** The nestlings may appear to squint or blink; feathers continue to emerge.



**DAY 8:** The eyes open – a good sign of normal growth and development.



**DAY 9:** The nestlings are more alert; feathers are mostly free of sheaths on the thigh and areas surrounding the chest and abdomen; bare skin patches are still visible.



**DAY 10:** Nestlings can crawl; the feathers mostly free of sheaths on the head, spine, and lower leg; feather sheaths disintegrate from the wing.



**DAY 11:** Feather sheaths continue to disintegrate, including the tail feathers; may notice white “dandruff” on nestlings or in the nest, due to feather sheath disintegration.



**DAY 12:** The nestlings are almost fully feathered, and the gray breast spots are evident.



**DAY 13:** Feather sheaths gone; evidence of the white eye ring; the wing feathers can be used to sex (males-bright blue; females-dull blue-gray). *Avoid opening nest boxes after this day as nestlings could fledge prematurely!*



**Length ~ 9 cm (~3.5 in.)**

**DAY 14:** Nestlings active and vocal; white eye ring more pronounced.



**DAY 15+:** Sleeker, more streamlined appearance; few, if any down feathers remain. Body length is 9 – 10 cm (3.6 – 3.9 in) *Fledging usually occurs between Days 15 - 18.*

The images and descriptions for this Growth Chart were created by Laura Palmer, Ph.D. (Pennsylvania State University, Department of Biology) under the auspices of a North American Bluebird Society (NABS) Joseph A. Kujanik Education grant. This document is an example of the how the NABS uses its member-derived resources to educate the public on the basics of successfully monitoring nestboxes for bluebirds. NABS also provides Fact Sheets on other aspects of bluebirding e.g., building/mounting nestboxes, as well as detailed information on how to monitor nestboxes and how to cope with problems one typically encounters (e.g., predators, competitors, heat, rain and cold) on a bluebird trail. Individuals who join NABS receive copies of all NABS Fact Sheets, as well as our full-color, quarterly journal, **Bluebird** which is filled with tips and stories from other bluebirders as well as updates on research and other items of interest to nestbox trail monitors.

*The North American Bluebird Society, Inc. is a non-profit education, conservation, and research organization that promotes the recovery of bluebirds and other native cavity-nesting bird species in North America.*

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