# **Hand-Feeding Tree Swallow Nestlings In The Field**

## Food Shortages can jeopardize development and survival of nestling Tree Swallows.

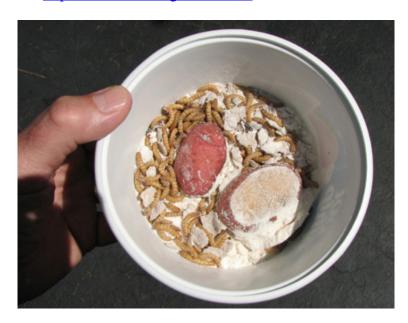
- If we find major nestling size differences within a brood that we suspect are due to food shortages we try to help.
- Our first choice is to foster the smallest or largest into another nest (see <u>Fostering Tree Swallow Nestlings</u>). But if there are no suitable nests for fostering, we may hand-feed small nestlings extra food in the field to bulk them up until they reach 12-days old when human handling must cease.
- Also, during extended periods of poor feeding due to bad weather, we may hand-feed every nestling in our grid between 4 and 12-days old until foraging improves.
- In both cases nestlings to be hand-fed are taken from their nest briefly, given as much food as they will eat, and then returned to the nest. They are rarely away from nests more than 10 minutes.

#### Don't parents become upset if one or more nestling is gone from the nest?

- Tree Swallow adults almost never react negatively if a nestling is removed briefly.
- However, swallow parents apparently *can* tell the difference between *empty* nests and ones with nestlings present, and may desert a nest if they find *all* nestlings gone.
- Therefore, we never, ever, remove all nestlings of a brood at the same time! If an entire brood needs to be fed we remove and feed half the brood at a time.

#### What do you feed nestling Tree Swallows?

- Tree Swallow parents normally feed insects to their nestlings, so we do the same.
- Mealworms, which are actually a type of flour beetle larvae, are our primary food source. They are usually inexpensive and available at most pet stores.
- We keep mealworms in plastic containers with small holes in the lids for ventilation.
- We add an inch or so of flour mixed with crumbled bran flakes which the mealworms eat and burrow in, and for moisture we place slices of raw potato on top of the food.
- The mealworms can be kept refrigerated so they won't mature into beetles.
- There is a great deal of information on mealworm feeding and culture at the bluebird web site Sialis: <a href="http://www.sialis.org/feeder.htm">http://www.sialis.org/feeder.htm</a>).



#### What is the 12-day handling limit?

- Tree Swallow nestlings older than 12 days may jump out of their boxes after handling, and if they can't fly strongly they usually die uncared-for on the ground.
- So *nestlings older than 12 days must not be touched* and their boxes should not be approached. They should not be hand-fed, regardless of the severity of the weather.
- The picture below shows "paintbrush-like" wing feathers of a typical 12-day-old nestling. Do not handle swallow nestlings with wing feathers longer than these!



### How are Tree Swallow nestlings hand-fed?

- We take the number of mealworms we expect to use to the field in a small container.
- We bring a second container with water to which we've added water-soluble bird vitamins and minerals.
- Mealworms are prepared by dropping them into the water mix and letting them absorb the water for several minutes. This will give nestlings hydration, nutrients, vitamins and minerals all in one package.
- Next, the nestling to be fed is removed from its box and taken at least 100' away. This allows parents at the box to feed the rest of their brood undisturbed.



- A young Tree Swallow seldom begs when hand-fed, so we *gently* use a fingernail to push down its *lower* bill.
- Then a water-soaked mealworm is inserted head-first into the back of the nestling's mouth. At this point a swallowing reflex usually occurs and the bird gulps the mealworm down with bobbing motions of its head and neck.





- We give nestlings a minute or so to rest before offering more food. Then the process is repeated until the nestling wants no more, which it shows by shaking its head and spitting food out. A nestling is not forced to eat if it clearly doesn't want to.
- Each feeding usually consists of from one to four mealworms, depending on the size and hunger level of the bird.
- After returning the nestling to its box we move to the next box with a needy nestling.
- Once we've completed a round of feedings we wait an hour or so, and then repeat the circuit. The number of feedings per day depends on our assessment of need.