MONTEREY NEWS

October 2022
Est. 1970 Vol. LII • Number 10

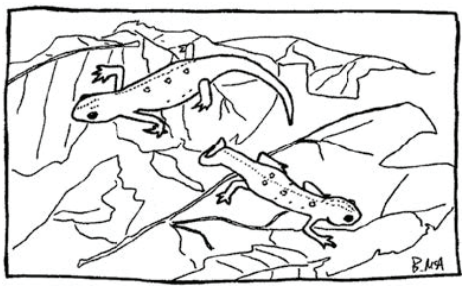
Red-spotted Newt or Red Eft

Some creatures enjoy such remarkable metamorphosis that they get at least two different names. One of these is a kind of salamander, most often noticed by us folks during its adolescent stage when it is a bright red-orange creature of the woods. At this time, we might call it a "red eft." We can also call it a "newt" at any time in its life, though very early on it is the "egg of a newt."

Our native eastern or red-spotted newt's egg can only be found in the water, where its mother has placed it on the stem of an aquatic plant in the shallows of a pond or lake. There it sits, not very close to any of the other more than three hundred eggs deposited singly over the course of several weeks by this female salamander. It will then hatch, and now we call it a larva. It will be half an inch long, yellow-green, with a grey stripe along each side from head to tail. This is an aquatic animal, with frilly external gills. In two or three months, it will be a full-sized newt larva, an inch and a half long. It is a carnivore and will have been gobbling down creatures small enough to manage.

The salamander is an amphibian and lives some of its life on land, and some in the water, the way frogs and toads do. The larva comes ashore, changed now to an eft. There are no more fancy gills, the animal has become bright orange, and now it is up on its legs. It walks away from the pond and takes up its terrestrial phase, the one we call an "eft."

The derivation of this word is hard to figure nowadays, though in Old English it might have been "efeta." For the animal, life in orange is safe. This new skin is equipped with a neurotoxin, and we refer to the orange color as "aposematic." It is a warning. Any blue jay that grabs a colorful eft will spit it out and not try one again. The same goes for many other bright orange small creatures, like Colorado potato beetles and certain butterflies.



The red efts get to be four inches long, tip to tip, and are speckled with red spots, edged in black. If picked up gently, they do not give off any neurotoxin. They are mostly diurnal, easy to see. Any time the temperature is above freezing, the efts will be walking about in the damp woods if there is no snow, or even crossing roads. In his book Amphibians and Reptiles, 1990, Tom Tyning writes of walking along a road in late summer after a rain. In one mile he counted 563 red efts. At this time of year, the newly emerged efts migrate away from their natal ponds, and Tyning writes that some populations also migrate in the fall back to their ponds as they are ready to change form again.

The juvenile or eft phase on land can be two to five years, and at the end of this time, when they are four inches long, they go back to the water. They will already be losing their bright orange or red look, changing to blend in with aquatic surroundings. They still have spots, but now they develop fins on their tails and are overall greenish. We can still call them newts, but they are not efts anymore.

Adult newts in the water may live fifteen years. They stay in the shallows, and do not develop gills. They get their oxygen through the skin, or by taking in air at the surface, through their nostrils. Male newts are darker than the females and when mating season comes, they develop special dark ridges on the insides of their hind legs and toes. These are for clasping the females, which is part of their mating dance. The two thrash around together, with the male on top, and he rubs his chin against her head. This courtship embrace inspires her to ovulate and then they disengage so the male can deposit a spermatophore on the bottom of the pond. The female follows him close behind and takes up the spermatophore into her cloaca, where fertilization occurs. Now she goes to thick growths of aquatic plants and starts attaching her many eggs one by one, and it can take about a week to place all 375-400 of them. They are very small and will hatch in three to five weeks, depending upon the water temperature. The eggs are brown on top and pale underneath. When they hatch, the tiny larvae sink to the bottom and hold still for about a week, but the cycle is rolling.

Red-spotted newts are our most common American salamander, also most visible. In 1758 the Swedish taxonomist Carolus Linnaeus, that observant naturalist, had not seen many salamanders. He explained they were scarce because "their Creator has not exerted his power (to create) many of them" because they were unattractive. "Foul and loathsome" is how he put it. His travels took him to Lapland, England, and France, but he can't have made it to eastern North America. Anyone who has met our redspotted newt could only call it lovely and a marvel. This creature is handsome, brilliant, fascinating. Just ask anybody who has seen one.

— Bonner McAllester