Appendix 6. Photographic guide to our salamanders.

## Redback Salamander

## Plethodon cinereus

Redback salamanders are our most common woodland salamanders. Find a moist, healthy forest in our area, start turning over rocks and logs, and you are likely to find them. This species lays its eggs on land and, as the lower right photo shows, the young look like miniatures of the adults.

This is a slim salamander. It usually has a reddish back. There is, however, a 'leadback' coloration which is greyer. Four-toed Salamanders, a possible source of confusion, are rarer, browner, have a bright white belly with dark dots, and a squarer nose. We have not yet found Four-toed Salamanders on any farms.



Northern Dusky Salamander Desmognathus fuscus

These salamanders are not as aquatic as the Two-lined, nor as terrestrial as the Redback. They are commonly found along the banks of streams or in seeps.

As young (upper two pictures), they have vague reddish dots. As adults, they are dark bodied, not as stocky as mole salamanders, but have heavy hind legs. A light line extending from the back of the eye to the back of the jaw is distinctive of this genus. The Mountain Dusky is similar, but said to have a herringbone pattern on its back; we haven't found it (so far as we know!).



As adults, this species seems unmistakable. It is a large (reportedly up to 10 inches long), black salamander with bright yellow polka dots. The gilled young develop for 2-3 months in the pools, finally metamorphosing into the dull semi-terrestrial version seen in the upper right hand corner.

Outside of their pond lives, they spend the year lurking in or near their burrows (hence the Ambystoma salamanders are called "mole salamanders").

Often the most obvious evidence of this species are its gelatinous egg clusters or small "spermatophores". Spermatophores are the tiny, sperm-topped structures males leave on pool bottoms in Spring; they look like single curds of cottage cheese.



This is a rarer vernal pool salamander. While it seems to frequent the same general haunts as Spotted Salamanders, it seems to be a more strictly woodland sort. This species apparently interbreeds with the Blue-spotted Salamander in some areas and forms an array of hybrids.

Jefferson Salamanders are greyish-black with a lighter, sometimes bluish speckling, especially along the sides. They tend to be slightly smaller than Spotted Salamanders but are similarly stocky. They are reported to spend their adult, non-breeding period in upland tunnels, and hence are also considered "mole" salamanders.



These are slim salamanders with long tails. Their usual coloration is goldentan with two black lines starting at the eye and running down each side. Occasionally, they apparently show up in red morphs. We were told by experts that the bright red salamander shown above right is also a Twolined.

Larvae were often found under rocks (as the photo of larvae awaiting rerelease, upper left, shows). The adults, while less abundant, were commonly found on or near shore. When released in shallow water, larvae head for the bottom, while adults head towards shore.



Red-spotted newts abound in our area. They are frequently found in permanent ponds, where their toxic skin appears to protect them from at least some predation. They have an interesting life-cycle: born in the pond, the young larvae develop until they are able to come ashore. Once ashore, they wander about for a year or two in the bright orange coloration shown at top. This is the Red Eft stage. They return to the ponds as adults, developing a darker coloration and a wide, propulsive tail.

There is no mistaking the Red Eft stage – its colors shout out for attention (apparently not a bad idea if you are poisonous). The adult newt is less conspicuous, but its red dots are usually apparent, and its slim head and broad tail are distinctive.