



FIG. 2. A) Ventral coloration of a typical *Hemidactylium scutatum* from Sullivan County, Tennessee, USA; B) ventral coloration of the partially melanistic *H. scutatum*.

color morphs including a melanistic one (Moore and Ouellet 2014. *Can. Field. Nat.* 128:250–259). Some populations of *P. cinereus* in Ohio have high proportions of melanistic individuals (Pfungsten and Walker 1978. *J. Herpetol.* 12:163–167). Additionally, a melanistic variant of *Plethodon dunni* (Dunn's Salamander) has been found in three Oregon counties (Storm and Brodie 1970. *Cat. Am. Amphib. Rept.* 82.1–82.2).

We observed a partially melanistic female *Hemidactylium scutatum* on 23 April 2022 (37.1 mm SVL, 67.5 mm total length). The female salamander was nesting in a wetland area at the Tennessee Valley Authority's Bouton Trail along the South Holston River (Sullivan County, Tennessee, USA; 36.51080°N, 82.11312°W; WGS 84) in a joint nest with one other female. We have a long-term project (16 years) 1.3 km to the Northeast where we have sampled over 1100 *H. scutatum* without an aberrant coloration ever being observed. On the same sampling day, we observed another partially melanistic individual 350 m to the southeast of the first partially melanistic individual (38.1 mm SVL, 74.5 mm total length).

Using Köhler (2012. *Color Catalogue for Field Biologists*. Herpeton, Offenbach, Germany. 49 pp.), we found the dorsal coloration of a typical individual to be Burnt Sienna (38) with Cream Color (12) splotches from the head to the constriction point of the tail. Tail coloration ranges from Buff (5) to Light Orange Yellow (7). The partially melanistic individual had more red tones on the dorsum. The head to the constriction point was Dark Carmine (61) with Scarlet (69) splotches. The tail was Light Chrome Orange (76; Fig. 1).

The ventral coloration difference was most striking. A typical individual has a white venter with black spots from the chin to the end of the tail. This partially melanistic individual had a white chin but showed no black spotting. The area from the neck to the constriction point was Burnt Sienna (38). Tail coloration was white and brown mottling with a few Light Buff (2) splotches (Fig. 2).

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***NOTOPHTHALMUS VIRIDESCENS* (Eastern Newt). DIET.** The ranges of *Notophthalmus viridescens* and *Ambystoma maculatum* (Spotted Salamander) overlap extensively and occur across many parts of eastern North America. Although both species breed in early spring within small bodies of water, their courtship behaviors differ. Adult *N. viridescens* are, in most populations, permanently aquatic. Breeding in this species is initiated by males courting females with one of two discrete behaviors (i.e., amplexus or a 'hula' display; Gabor et al. 2000. *Behav. Ecol.* 11:115–124). Unlike adult *N. viridescens*, adult *A. maculatum* are terrestrial and breed within aquatic environments (e.g., small ponds, vernal pools, lakes, etc.). In early spring, male *A. maculatum* travel to wetlands, usually several days before females arrive, and begin serially depositing spermatophores throughout appropriate courting habitats. Individual males release several dozen spermatophores that are often deposited without the presence of a female. Typically, female *A. maculatum* find the spermatophores and absorb them with no actual courtship occurring between the sexes (Dugan 2011. M.S. Thesis. Virginia Commonwealth University, Richmond, Virginia. 53 pp.). Although *N. viridescens* and *A. maculatum* occur in sympatry over an enormous portion of eastern North



FIG. 1. *Notophthalmus viridescens* holding the spermatophore of *Ambystoma maculatum* (A) and then swallowing it (B). We observed numerous *N. viridescens* consuming entire spermatophores or tearing pieces off and consuming them (C, D).

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America - including breeding in the same wetlands - relatively little has been published on behavioral interactions between these species. Herein, we document observations of several *N. viridescens* consuming the spermatophores of *A. maculatum* and discuss the implications of this newly documented interaction.

The observations occurred on 7 March 2022 over a duration of 20 min (from 2120–2140 h) at the Lees-McRae College Field Station in Avery County, North Carolina, USA (36.1705°N, 81.9165°W; WGS 84; ca. 1100 m elev.). At the time of the observations, the temperature was approximately 12°C with an overcast sky and light rain. The region is dominated by mesic, mixed coniferous/deciduous forest. The observations occurred within an active *Castor canadensis* (North American Beaver) pond that contained populations of small fish, crayfish, and several species of amphibians. Among them were actively breeding *A. maculatum* alongside adult *N. viridescens*. Our observations were focused on a group of three male *A. maculatum* that had laid a large aggregation of spermatophores (ca. 50–60) and 5–6 adult *N. viridescens*. We observed numerous instances (ca. 10) of *N. viridescens* feeding on *A. maculatum* spermatophores that resulted in either complete consumption of the spermatophore (Fig. 1A, B) or partial consumption (Figs. 1C, D). All of the *N. viridescens* in this group congregated around the spermatophores to consume them in a small area roughly 0.25 × 0.25 m. Although the *A. maculatum* males remained present during this event, we did not observe any aggression or physical interactions between them and the *N. viridescens* feeding on the spermatophores.

Although interspecific and intraspecific spermatophore consumption has been previously reported for various salamander species, we believe these observations represent the first report for *N. viridescens* consuming the spermatophores of *A. maculatum* and, potentially, the first report for *N. viridescens* consuming heterospecific spermatophores in the wild of any kind. We are also unaware of any other reports of *A. maculatum* spermatophores being predated by another salamander species. For *N. viridescens*, heterospecific spermatophores may represent a valuable nutritional resource at a time of year when food is relatively scarce. Although we believe our report is the first documentation of this behavioral interaction, consumption of spermatophores is known in *N. viridescens*. However, past reports have been in the context of parasitic conspecifics that induce spermatophore production from unwitting males as a food source (Massey 1988. *Anim. Behav.* 36:205–210).

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PLETHODON DORSALIS (Northern Zigzag Salamander). **DIURNAL ACTIVITY.** During daylight hours, *Plethodon dorsalis* occupy moist microhabitats beneath cover objects on the ground, subterranean cavities, and bluff crevices (Palis 2022. *Bull. Chicago Herpetol. Soc.* 57:34–37; Petranka 1998. *Salamanders of the United States and Canada*. Smithsonian Institution Press, Washington, D.C. 587 pp.). On rainy nights, *P. dorsalis* may become active on the soil surface and climb onto tree trunks (Palis 1990. *Herpetol. Rev.* 21:19; Scheffers 2010. *Herpetol. Rev.* 41:190). Here, I report an unconcealed, diurnally active *P. dorsalis*.



FIG. 1. *Plethodon dorsalis* on top of dry log, Union County, Illinois, USA.



FIG. 2. Location of *Plethodon dorsalis* on top of log before dropping into leaf litter.

At 1423 h, 5 April 2021, I observed an adult *P. dorsalis* of unknown sex on top of a barkless section of a 28-cm diameter downed log in direct sunlight in oak (*Quercus* spp.)-hickory (*Carya* spp.) forest prior to leaf out, in Shawnee National Forest, Union County, Illinois, USA (37.53351°N, 89.34879°W; WGS 84; Figs. 1, 2). The day was hazy-sunny (cirrus clouds) with a light southwest wind (19 kph), air temperature was 25.6°C and relative humidity was 41%. Because it had not rained since 30 March, the surface of the log and adjacent leaf litter were dry. I detected the salamander from about 2 m away as I walked on top of the log. I stepped off the log and approached the salamander from the ground. The salamander appeared fully hydrated and remained motionless for several seconds while being photographed before dropping 15 cm into 25-cm deep, dry leaf litter piled by wind against the log.

The physiology of small terrestrial plethodontids typically limits surficial behavior to periods of high humidity, such as windless, rainy nights (Fraser 1976. *Ecology* 57:459–471; Jaeger 1978. *Copeia* 1978:686–691). Therefore, the presence of an adult *P. dorsalis* atop a dry log in sunlight on a windy afternoon is surprising. The salamander may have climbed onto the log to elude a predator, to pursue prey, or to raise its body temperature to induce behavioral fever in response to a pathogen. Although the literature contains anecdotal reports of diurnal activity