years prior. The male was measured (160 mm total length, 85 mm SVL, 13.0 g). I returned to the breeding pool the following night (28 April 2020), and observed 2 different albino individuals, though I only captured one. An egg mass with presumably albino embryos was also photographed in the same location (Fig. 3). The egg mass was not disturbed but disappeared before the embryos developed fully.

Of the individual *A. maculatum* sampled (n < 100), four adult albino individuals were observed. It is possible that the responsible gene is geographically isolated to a small area, as I have surveyed numerous (>50) *A. maculatum* breeding pools in the area and have encountered no aberrantly colored individuals in other locations. Fossorial species may not be subjected to the same survival costs conferred by albinism on other species (Kornilios 2014. Herpetol. Notes 7:401–403). The fossorial life history and nocturnal breeding habits of ambystomatids (mole salamanders) may explain why albinism can persist in a population. Perhaps living underground lowers selection pressures applied by visual predators, ultraviolet radiation, and thermoregulation that make cases of albinism in the wild so rare in other amphibian species.

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***AMBYSTOMA OPACUM* (Marbled Salamander). ATYPICAL NEST SITES.** The discovery of inconspicuous nests of secretive species not only expands knowledge but can reveal previously unknown behaviors and ecological consequences of those behaviors. *Ambystoma opacum* exhibits the nesting strategy of laying their eggs terrestrially under cover. Here, we report multiple occurrences of *A. opacum* nesting inside logs, which may be atypical for this species.

From 20–22 October 2020 in Tuskegee National Forest, Macon County, Alabama (32.48719°N, 85.60339°W; WGS 84), JMH found three female *A. opacum* attending nests inside log crevices, rather than in shallow depressions in the soil as is expected for this species (Petranka 1998. Salamanders of the United States and Canada. Smithsonian Institution Press, Washington, D.C. 587 pp.). At 1110 h on 20 October 2020, JMH found one adult female (69 mm SVL, 7.91 g) attending a nest between the bark and trunk of a fallen, decaying log. Upon rolling the log, a small slab of bark fell away revealing the female and her eggs, indicating the female had oviposited between the bark and the trunk (Fig. 1A). Several eggs were still wedged between the bark and trunk (Fig. 1B). At 0940 on 21 October 2020, JMH found another nest inside a crevice of a different log (Fig. 1C), and at 1358 on 22 October 2020, JMH found a third nest inside the crevice of a third log (not pictured, but like that shown in Fig. 1C). On 21 December 2010, BMG found a nest inside a log with two adult females in the Kisatchie District of Kisatchie National Forest in Natchitoches Parish, Louisiana (31.44578°N, 93.09314°W; WGS 84). The nest contained 225 eggs; thus, this was probably a combination of two nests. The nest was ca. 15 cm above ground level. Finally, over six years of study (1990–1995) at Forest Park, Baton Rouge, Louisiana (30.42508°N, 91.03066°W; WGS 84), JSD found three nests (of 184 total) inside logs. All three nests were attended by females. Importantly, no eggs in any of these nests were in contact with the soil substrate, as is the usual condition for this species (see below).

Marbled Salamanders typically deposit eggs in dry vernal pools during the autumn months (September through December; Petranka 1998, *op. cit.*). Embryos complete development in 2–4 weeks, but hatching is delayed until the nest is inundated with water due to seasonal rainfall (Noble and Brady 1933. Zoologica 11:89–132). Females usually create nests by excavating shallow depressions in the soil beneath various cover objects such as logs, rocks, leaves, moss (Noble and Brady 1933, *op. cit.*; Graham 1971. Environmental effects on deme structure, dynamics, and breeding strategy of *Ambystoma opacum* (Amphibia: Ambystomatidae), with a hypothesis of the probable origin of the marbled salamander life-style. Ph.D. Dissertation, Rutgers University, New Brunswick, New Jersey. 157 pp.; Jackson et al. 1989. Can J. Zool. 67:2277–2281), bark (Deckert 1916. Copeia 28:23–24), clumps of grass (Figiel and Semlitsch 1995. J. Herpetol. 29:452–454), and even garbage (Trauth et al. 1989. J. Arkansas Acad. Sci. 43:109–111). Nests are also found in holes in the ground created by crayfish or rodents (King 1935. Ohio J. Sci. 35:4–15; JSD, unpubl. data). Brimley (1920. Copeia 80:25–25) found one nest that was between two loose slabs of pine bark (i.e., not in contact with the soil) and Noble and Brady (1933, *op. cit.*) report females nesting between sphagnum moss and tree roots; however, to our knowledge, no author has reported nests inside log crevices or between the bark and trunk of a log.

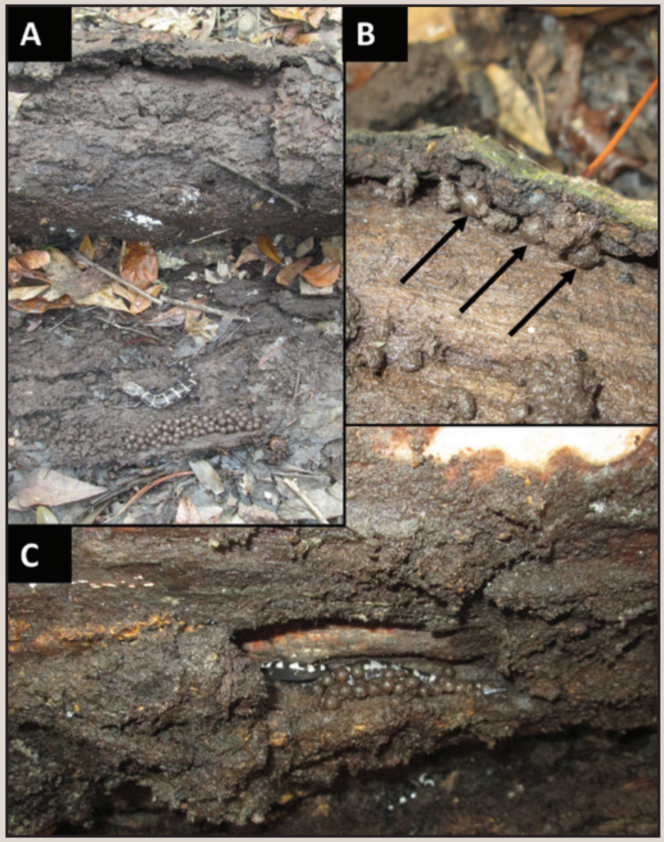

FIG. 1. Atypical nest sites of *Ambystoma opacum* discovered on 20–21 October 2020 in Tuskegee National Forest, Macon County, Alabama, USA: A) eggs and an attending female atop a slab of bark that broke away from a fallen tree; B) eggs from this nest that are still wedged between the trunk and the bark (denoted by arrows); C) a nest and two adult *Ambystoma opacum* inside a crevice in a rotting log.

There are several potential explanations for this unusual nesting behavior. First, the 2020 nesting season in Alabama was characterized by heavy rains from hurricanes Sally and Delta (16 September 2020 and 10 October 2020, respectively). As a result, the vernal pools flooded prematurely (i.e., prior to nesting), which severely limited the number of suitable nesting sites since *A. opacum* are poor swimmers and exclusively nest terrestrially (Noble and Brady 1933, *op. cit.*). Indeed, at the Alabama site, several other nests were found beneath two of the logs that contained a nest in a log crevice (n = 6 nests, n = 4 nests). Moreover, the 2010 nesting season in Louisiana resulted in 100% nest failure due to a drought; therefore, moist nesting sites may have been scarce (Glorioso et al. 2015. Herpetol. Notes 8:347–356). The paucity of high-quality nesting sites may have driven females to nest in atypical locations. Second, these study sites may be unusual due to the vast number of fallen timber used for nesting. Most authors report females overwhelmingly select nest sites beneath leaf litter or grass rather than under logs or bark (Figiel and Semlitsch 1995, *op. cit*; Gibson and Sattler 2009. Catesbeiana 29:48–51; Jackson et al. 1989, *op. cit.*; King 1935, *op. cit.*; Noble and Brady 1933, *op. cit.*; Petranka 1990. J. Herpetol. 24:229–234; but see Graham 1971, *op. cit.*). Indeed, at a vernal site ca. 1 km from the Alabama study area, females nest almost exclusively under leaves (96% of nests; n = 42) and rarely under logs (4% of nests; n = 2; Petranka and Petranka 1981. J. Alabama Acad. Sci. 52:20–24); however, nests are abundant under fallen timber at both the Alabama and Louisiana sites (JMH found 21 of 24 nests under or inside logs; BMG found 30 of 30 nests under or inside logs; JSD found 133 of 184 nests under or inside logs). The abundance of fallen timber may allow females to exploit nest microhabitats, like log crevices, unavailable at other locations. Finally, historical inertia combined with biased sampling may account for the paucity of nests found in these and other unusual microhabitats. Early descriptions of nesting did not consider that females may nest inside logs (e.g., King 1935, *op. cit.*; Noble and Brady 1933, *op. cit.*), and researchers may not find such nests because they are not looking for them. Indeed, the first nest JMH discovered would not have been found if the slab of bark had not fortuitously broken away while turning the log. Of course, JSD's data indicate that the behavior of nesting in logs may be relatively rare since only 2% of nests were found inside logs across the multi-year study.

As for the viability of these nests, females routinely nest in confined areas (e.g., burrows in the ground: Noble and Brady 1933, *op. cit.*, King 1935, *op. cit.*; beneath thick leaf litter: Gibson and Sattler 2009, *op. cit.*), indicating that hatchlings must commonly navigate a structurally complex environment to exit the nest. Additionally, McAtee (1933. Copeia 1933:218–219) experimentally demonstrated that hatching larvae can successfully emerge from the nest even when buried beneath one inch of soil. Therefore, it is reasonable that larvae from the nests reported here could find their way out of the nest and into the water column once the nests are inundated by seasonal rains.

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***AMBYSTOMA TIGRINUM* (Eastern Tiger Salamander). ATTEMPTED PREDATION.** Ambystomatid salamanders may employ an assortment of defense behaviors to avoid predation by a

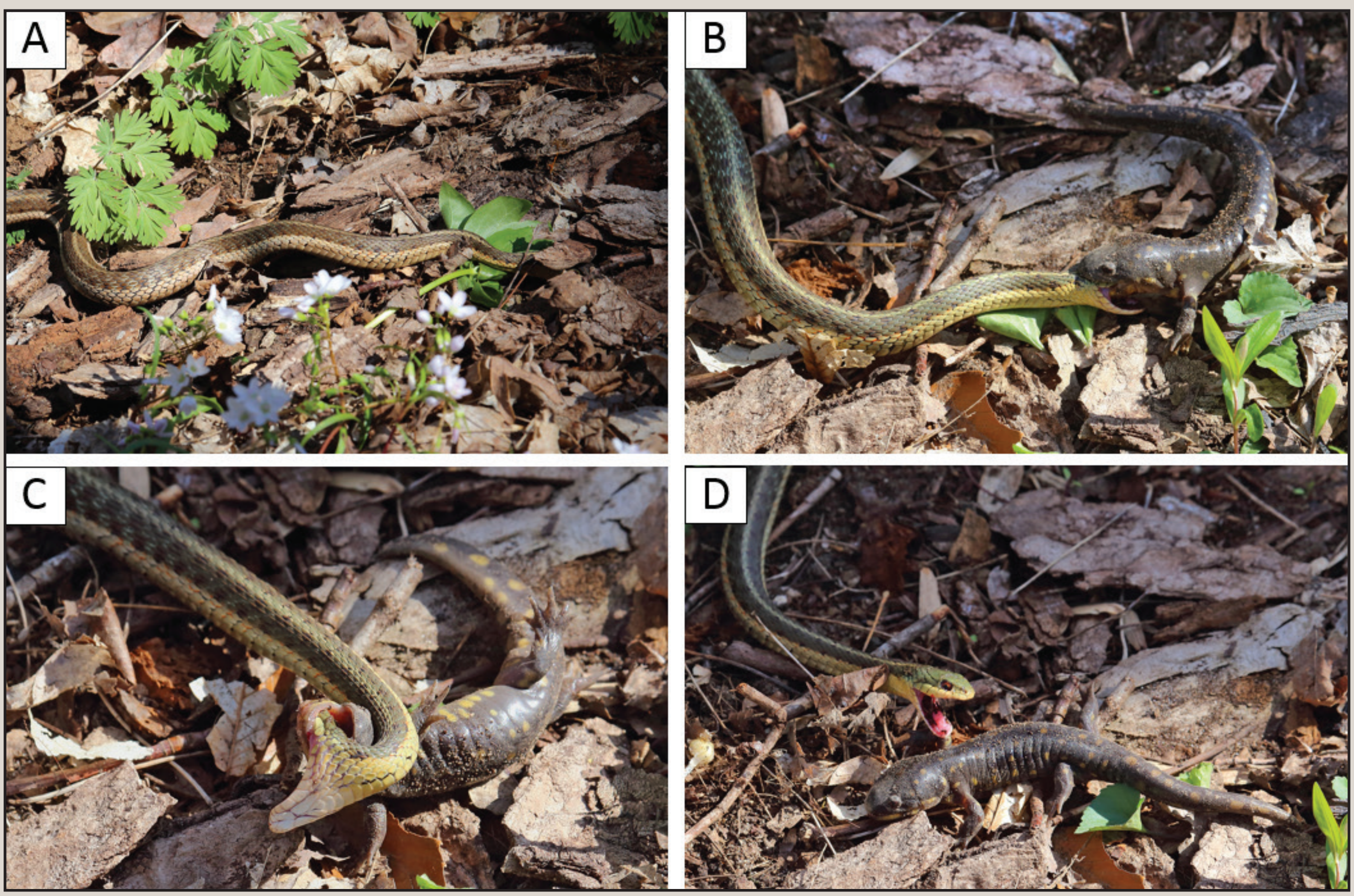

Fig. 1. A) *Thamnophis sirtalis* with its head in a burrow; B) *Ambystoma tigrinum* clasping onto the *T. sirtalis* (note relaxed jaw in *T. sirtalis*); C) *T. sirtalis* attempting to free itself; and D) both individuals detached after the incident.