Thecadactylus rapicauda regularly forage next to buildings, looking for large insects attracted by artificial lights (Acosta-Chaves et al. 2015. Mesoam. Herpetol. 2:197–199) so we do not believe this is an example of reproductive interference. The *A. callidryas* may have amplected the *T. rapicauda* when confused during reproductive arousal with a large female *A. callidryas*. To the best of our knowledge, this is the first published record of an *A. callidryas* amplecting a reptile, and probably one of the first records of an anuran amplecting a lizard.

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***ALYTES OBSTETRICANS* (Common Midwife toad). COLORATION.** During surveys for the regional atlas, we observed an *Alytes obstetricans* tadpole with unusual coloration—a uniform pale background color, but with very minimal amounts of the dark reticulate dorsal pattern in the tail that is usually typical for this species (Fig. 1). This individual presented dark eyes, instead of the red eyes typical of albinism. The tadpole was observed near a small stream on 21 January 2020, in Vigo, Pontevedra, Spain. Leucistic morphs are uniformly colored, having virtually no dark markings, with dark eyes. Albinism sensu lato has been recorded in some species of *Alytes* (Benavides et al. 2000. BAHE 11:83; Diego-Rasilla and Luengo 2000. BAHE 18:92–93).

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FIG. 1. Leucistic morph of *Alytes obstetricans* tadpole from Pontevedra, Spain.

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***ATELOPUS COYNEI* (Coyne's Harlequin Frog). REPRODUCTION.** Previous work on harlequin toads (genus *Atelopus*) demonstrate wide variability in breeding throughout the year, and in many species, it is unclear what mechanism (e.g., rains, calling males) initiates breeding behavior (Lötters 1996. The Neotropical Toad Genus *Atelopus*, Checklist-Biology-Distribution. M. Vences and F. Glaw Verlags, Köln, Germany. 143 pp.). *Atelopus coynei* is endemic to Ecuador and had not been sighted since 1984 (only four years after it was described; Santiago et al. 2004. The IUCN

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FIG. 1. Male and female *Atelopus coynei* from Carchi Province, Ecuador in axillary amplexus.

Red List of Threatened Species 2004:e.T54501A11151836) until rediscovered in 2012 (http://inaturalist.org/observations/55996, accessed 17 Feb 2020). The original description suggests breeding may occur in the early dry season (June–September) as evidenced by high concentrations of males near the river in July 1976 (Miyata 1980. Breviora 458:1–10). Here, I report a breeding pair of *A. coynei* following the first heavy rain events of the wet season (December 2019; Fig. 1).

This observation was made in Chinambí, Carchi Province, Ecuador (exact coordinates withheld due to the sensitivity of the population). I found one pair of *A. coynei* in axillary amplexus and one lone male near the stream on 10 December 2019, nearly two weeks prior to the summer solstice (21 December 2019) and after unusually high rains during that period (7–10 December 2019). Although the rainy season in the region ranges from December to May, heavy rainfall typically does not occur until January and peaks in February-March, with high variability in the months before and after the wet season (Garreaud 2009. Adv. Geosci. 22:3–11). Our finding of the amplexed pair immediately following this early rain event suggests that rain events may initiate breeding in this species, although more evidence is needed to be conclusive.

To my knowledge, this observation is the first reported finding of an *A. coynei* breeding pair in amplexus in situ. If original observations of high streamside densities of males by (Miyata 1980, *op. cit.*) do indicate breeding in July during the dry season, our observations together suggest that breeding can occur throughout the year. Alternatively, Miyata (1980, *op. cit.*) may have been unable to detect frogs throughout successive visits because of increasing human disturbance, rather than breeding behavior patterns. Miyata (1980, *op. cit.*) noted that human disturbance could explain their observations, as they observed increased pollution and sediment run off from human disturbance in returning trips (both in the same and different seasons) from the initial collection. Therefore, their observation of relatively high abundance in July 1976 (taken as evidence for breeding) could be due to sampling a healthier population, with all subsequent trips sampling a declining population. Lastly, there could be population differences in breeding patterns due to geographic location, as this is a different population than described by Miyata (1980, *op. cit.*). This observation provides new information on the breeding behavior of *A. coynei* as the only report of a breeding pair in

situ and suggests that breeding may be in part initiated by rain events. I hope this note will be useful in continued research, management, and conservation of this species.

This observation was made possible by my field crew: Alex Achig-Vega, Diego Quirola, Morley Read, and Clever Velez, as well as resources and personnel from collaborating institutions: Centro Jambatu de Investigación y Conservación de Anfibios (Luis A. Coloma), Universidad Tecnológica Indoamérica (Mónica Páez-Vácas, David Salazar-Valenzuela) and Michigan State University (Sarah W. Fitzpatrick). All work involving animals was approved by IACUC (PROTO201900341). Fieldwork was funded by National Geographic Early Career Grant EC-60150R-19 awarded to Kyle Jaynes.

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***ATELOPUS HOOGMOEDI* (Hoogmoed Harlequin Toad), *RHINELLA CASTANEOTICA* (Para Toad), *RHINELLA LESCUREI*, and *AMEEREGA PULCHRIPECTA* (Silverstone's Poison Frog). CLIMBING BEHAVIOR.** Climbing behavior is common in a variety of vertebrates, including amphibians, reptiles, birds, and mammals (Hill et al. 2018. J. Exp. Biol. 221:jeb168179). This behavior offers many advantages, including access to safety from ground-dwelling predators, resting places, and access to food (Granda-Rodriguez 2008. Herpetotropicos 4:87–93). Climbing behavior has been reported for bufonids of the genus *Rhinella*: *R. margaritifera* and *R. castaneotica* (De Noronha et al. 2013. Herpetol. Bull. 124:22–23). In this study, we provide data on climbling behavior for two species listed as "Data Deficient" (*R. lescurei* and *Ameerega pulchripecta*) and one listed as "Vulnerable" (*Atelopus hoogmoedi*; https://www.iucnredlist.org, accessed 30 January 2020).

Observations were made during nocturnal visual encounter surveys (Heyer et al. [eds.] 1994. Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians. Smithsonian Institution Press, Washington, D.C. 384 pp.), from 2018 to 2019, in two protected areas in Amapá, Brazil: (1) Cancão Municipal Natural Park (0.9008°N, 52.0134°W), Mmunicipality of Serra do Navio, and (2) Reserva Extrativista Beija Flor Brilho de Fogo (0.8289°N, 52.1878°W), Municipality of Pedra Branca do Amapari.

FIG. 1. Individuals of the bufonid *Rhinella castaneotica* (A, B, C) and dendrobatid *Ameerega pulchripecta* (D) observed on vegetation above ground level, in the Cancão Municipal Natural Park, municipality of Serra do Navio, Amapá, Brazil.

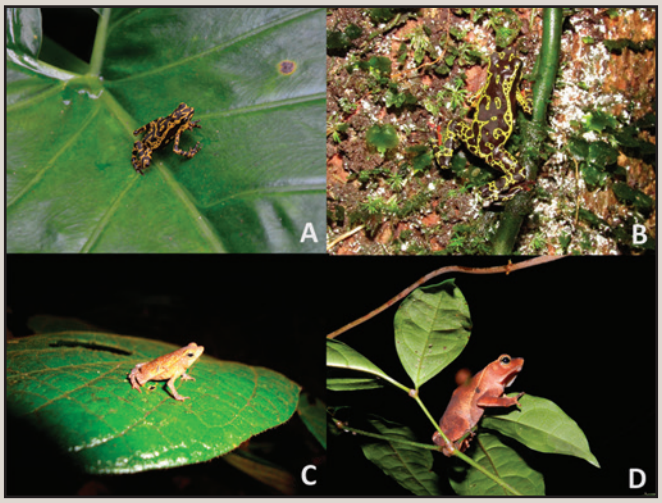

FIG. 2. Individuals of the bufonids *Atelopus hoogmoedi* (A, B), *Rhinella castaneotica* (C) and *Rhinella lescurei* (D) observed on vegetation above ground level, in the Reserva Extrativista Beija Flor Brilho de Fogo, municipality of Pedra Branca do Amapari, Amapá, Brazil.

In Cancão Municipal Natural Park we observed three *Rhinella castaneotica* (Bufonidae) and one *Ameerega pulchripecta* (Dendrobatidae). The first *R. castaneotica* was recorded on a leaf, near some temporary water bodies, 108 cm above the ground (Fig. 1A). The second (Fig. 1B) and the third individuals (Fig. 1C) were observed at 32 cm and 47 cm, respectively, above the ground inside the forest. One *A. pulchripecta* was observed on a leaf 50 cm from the soil surface, on the edge of the forest near a trail (Fig. 1D).

In Reserva Extrativista Beija Flor Brilho de Fogo we observed climbing behavior in three *Atelopus hoogmoedi*, one *R. castaneotica*, and one *R. lescurei*. One adult male *A. hoogmoedi* was recorded on an "Aninga" leaf (*Montrichardia arborescens*), 176 cm above the water (Fig. 2A) at Igarapé Água Fria. One juvenile *A. hoogmoedi* was also found on a leaf 43 cm above the ground, inside paleovárzea forest. The third *A. hoogmoedi* was recorded on the trunk of a tree 174 cm above the ground (Fig. 2B). The fourth specimen, a juvenile *R. castaneotica*, was recorded on a leaf 53 cm above the ground (Fig. 2C), and the fifth specimen found was *R. lescurei* on a stem at 154 cm above the ground (Fig. 2D).

The climbing behaviors observed in terrestrial bufonids and dendrobatids could be due to shifting predator avoidance strategies (Toledo et al. 2011. Ethol. Ecol. Evol. 23:1–25). In this study it was evident that a wide range of perches were available at a variety of heights for the bufonids. Further contributions to climbing behavioral data can help in taxonomic issues and in effective biodiversity conservation strategies given the current scenario of growing deforestation in the Brazilian Amazonia.

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