but they also surmised that large populations likely reside in tree cavities that are difficult to search, such as hollow tree trunks and cavities containing decayed wood. Our observation is the first record of *A. vagrans* using *T. plicata* as an arboreal habitat. Because the felled tree broke apart on impact with the ground, we had a unique opportunity to document individual *A. vagrans* using internal decayed wood cavities in the tree's main trunk at ca. 12 meters above the ground. *Thuja plicata* is narrowly distributed along the coastal rainforests of northern California and, similar to *S. sempervirens*, mature trees often have complex multiforked crowns (Arno and Hammerly 2020. Northwest Trees. Mountaineers Books, Seattle, Washington. 601 pp.). Our observation adds to previous research showing late seral conifers with complex crowns provide a unique arboreal niche for terrestrial salamanders living in temperate coastal rainforests of North America.

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***CRYPTOBRANCHUS ALLEGANIENSIS ALLEGANIENSIS* (Eastern Hellbender). PREDATION.** Salamanders have many predators, including aquatic foraging predatory birds such as *Grus canadensis* (Sandhill Crane) and *Ardea herodias* (Great Blue Heron), commonly observed in wetlands (Dye 1982. Fla. Field. Nat. 10:76; Brodman and Pfingsten 2010. Herpetol. Rev. 41:186). Amphibians are rarely reported in the diet of eagles compared to mammals, other birds, reptiles, and fish (Olendorff 1976. Am. Midl. Nat. 95:231–236; Watson and Davies 2015. Northwestern Nat. 96:81–86). Moreover, in freshwater habitats, *Haliaeetus leucocephalus* (Bald Eagle) often prefers fish as prey (Todd et al. 1982. J. Wildl. Manag. 46(3): 636–645). Reptiles are occasionally consumed by eagles, but rarely, as they comprise less than one percent of their diet (Palma et al. 2006. J. Appl. Ecol. 43:1075–1086.). Similarly, other raptors, including owls, have been observed to prey on amphibians, albeit at low frequencies (Hacker et al. 2021. Avian Res. 12:1–11.). *Haliaeetus leucocephalus* have been documented to consume reptiles, such as turtles and snakes, and rarely anurans (Grubb 1995. Wilson Bull. 107: 258–274.). However, in some areas, birds may represent up to 16% of predation encounters reported for salamanders (Jobe et al. 2019. Food Webs 21:1–4). In the southeast, avian predators in the family Corvidae (e.g., crows and jays) reportedly prey on salamanders, including *Pseudotriton ruber* (Red Salamander) and *Gyrinophilus porphyriticus* (Spring Salamander) (Pierson et al. 2022. Southeast. Nat. 21:24–31.), as well as *Ambystoma tigrinum* (Larsen 1999. Blue Jay 57:189–190). Here, we report two predation events of *Cryptobranchus alleganiensis alleganiensis* by *H. leucocephalus* and discuss its relevance to aquatic ecosystems.

The first observation occurred on 16 May 2023 and was reported to the North Carolina Wildlife Resources Commission (NCWRC) by landowner Mark Domske on the riverside of private property in the New River basin, Ashe County, North Carolina. The landowner observed a *H. leucocephalus* fly over his yard and drop the skeletal remains of an adult *C. a. alleganiensis* measuring ca. 29.5 cm (Fig. 1A). The second observation occurred on 29 August 2023, at 1222 h, when a *H. leucocephalus* was observed from the deck of a private residence perched on a large, downed tree within the South Toe River, near Burnsville, North Carolina. The locations for both observations are on file with the NCWRC and are withheld due to private property and conservation concerns. This *H. leucocephalus* was observed holding an adult *C. a. alleganiensis* in its talons, with the hellbender actively

PHOTOS BY LORI WILLIAMS AND ROSITA FERRELL

FIG. 1. Remains of predation event (A) and image of *Cryptobranchus alleganiensis alleganiensis* being predated upon by a *Haliaeetus leucocephalus* (B) in western North Carolina, USA.

moving, indicating it was still alive (Fig. 1B). The *H. leucocephalus* then proceeded to briefly peck at the *C. a. alleganiensis*. Within approximately two minutes, the *H. leucocephalus* flew away from the rock with the live *C. a. alleganiensis* still in its talons.

These observations are important to document as predation events by raptors on amphibians are rare. We suspect *H. leucocephalus* may opportunistically consume *C. a. alleganiensis*, possibly when they are more active and visible in streams during the breeding season. Another possibility is that *H. leucocephalus* may scavenge dead *C. a. alleganiensis*, which may be the case for the first observation reported here of skeletal remains. Larger salamanders predated by birds include *Siren intermedia nettingi* (Western Lesser Sirens) predated by *Buteo lineatus* (Red-shouldered Hawk) (Dobbs and Dobbs 2003. Herpetol. Rev. 34:47), and *Amphiuma means* (Two-toed Amphiuma) predated by *Strix varia* (Barred Owl) (Beane 2005. Herpetol. Rev. 36:295). While other predators likely represent more dominant consumers of salamanders, avian predation may require further examination in streams. Other rare predation events include *Lontra canadensis* (River Otter) consuming *C. alleganiensis* (Hecht et al. 2014. Herpetol. Rev. 45:471). Therefore, further work on the ecological links between avian predators and amphibian communities should be addressed, possibly by trail camera surveys or non-invasive meta-barcoding field diet surveys to identify species depredated across potential predatory taxa in lotic ecosystems.

The authors were made aware of these predation events via social media, a local online news post, and by reporting to the NCWRC. We recommend researchers work closely with state agency personnel in their geographic area, as engaging the public may lead to increased reports of unique behaviors in herpetofauna. We thank Rosita Ferrell for information on this predation event and permission to use the image, as well as Mark Domske for his observation reporting.

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***DESMOGNATHUS OCHROPHAEUS* (Allegheny Mountain Dusky Salamander). DIET.** On 6 May 2021, while completing monitoring surveys for the federally threatened *Plethodon nettingi* (Cheat Mountain Salamander) in Tucker County, West Virginia, USA (1142 m elev.; specific location withheld in compliance with state of West Virginia sensitive species data practices), we captured an adult *Desmognathus ochrophaeus* (39 mm SVL) under a log. Upon capture, the *D. ochrophaeus* was placed in a small zip-to-close plastic bag to await field measurements. Shortly after placement in the bag, the *D. ochrophaeus* regurgitated a juvenile *Plethodon cinereus* (Eastern Red-backed Salamander; 13 mm SVL; Fig. 1), missing most of its tail. Although consumption of salamander prey has been documented in *Desmognathus* species previously (e.g., *D. quadramaculatus*, Camp. 1997. J. Herpetol. 31:613–616), *D. ochrophaeus* are not typically considered predators of salamanders. This record serves as one of a few observations of *D. ochrophaeus* preying on other salamanders and raises concern for potential impacts to *P. nettingi* that are of similar size and co-occur with *P. cinereus* and *D. ochrophaeus*. Further research to determine the frequency of salamander depredation events by *D. ochrophaeus*, and more specifically, whether *P. nettingi* are preyed upon by *D. ochrophaeus* is warranted.

FIG. 1. Adult *Desmognathus ochrophaeus* with a recently regurgitated juvenile *Plethodon cinereus* from West Virginia, USA.

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***EURYCEA* SP. #3. HABITAT ASSOCIATIONS.** Currently undescribed *Eurycea* species #3 (Devitt et al. 2019. PNAS 116:2624–2633) within the *E. troglodytes* complex is the most western-known *Eurycea* in Texas. Although specimens have been deposited in collections and there is available genetic material, no formal description has been undertaken. Additionally, no information on the distribution and abundance or habitat associations for *E.* sp. #3 exist. The following study took place on the Devils River State Natural Area (DRSNA) and Dolan Falls Preserve (DFP), which are managed by the Texas Parks and Wildlife Department and The Nature Conservancy, respectively, in Val Verde County within the Edwards-Trinity Aquifer.

A survey was conducted in January 2016, resulting in a map of Finegan, Blue, and Dolan springs along and near the upper Devils River ca. 56 km north of Del Rio, Texas. Spring locations were mapped using a Trimble Nomad GPS unit and a Pro XT receiver and post-processed. We collected elevation data using Topcon auto level and tied into local benchmarks. Data were collected, including spring locations (latitude and longitude), elevation, spring type (orifice, upwelling, etc.), primary and secondary substrate (based on an expanded Wentworth scale), water chemistry, and flow. Overall, a total of 102 spring openings were mapped. This map was used to create a stratified random study design that distributed sampling effort between the mapped sites. Stratification was based on flow and substrate, and 22 spring sites were selected and actively sampled in April, May, July, August, October, and November of 2016.