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CHIROPTEROTITRON CHONDROSTEGA. PREDATION. Chiropterotitron chondrostega is an endemic salamander from Mexico, and categorized as Under Special Protection by Mexican laws, and as Endangered according to the IUCN criteria. Its distribution encompasses the states of Hidalgo, Puebla, San Luis Potosí, Tamaulipas, and Querétaro (Dixon and Lemos-Espinal. 2010. Anfibios y Reptiles del Estado de Querétaro, México. Texas A&M University, Universidad Nacional Autónoma de México and CONABIO. CDMX, México. 428 pp.). It is an uncommon species that is distributed at elevations from 2000 to 2300 m, in pristine pine-oak forests. It is believed to be insectivorous (Vega-López and Álvarez. 1992. La Herpetofauna de los Volcanes Popocatépetl e Iztaccíhuatl. Instituto de Ecología, CDMX, México. 128 pp.).

At 1611 h on 17 July 2018, we encountered an adult Rhadinaea gaigeae preying on an adult C. chondrostega in a pine-oak forest in the municipality of Pinal de Amoles, Querétaro, Mexico (21.13030°N, 99.63140°W, WGS 84; 2430 m elev.). The snake captured the salamander by the head and struggled to immobilize its prey for 15 min before starting to swallow it, starting with the anterior body portion (Fig. 1). This is an unusual record because little is known about the natural history of both species, especially C. chondrostega. We did not find previous records of predation or feeding between these two species, but it is known that R. gaigeae may feed on other salamanders like Aquiloeurycea cephalica (Nieto and Pérez 1999. Anfibios y Reptiles del Estado de Querétaro. CONABIO. CDMX, México. 144 pp.), which is a sympatric species with C. chondrostega.

Fig. 1. Chiropterotirton chondrostega predated by Rhadinaea gaigeae in Pinal de Amoles, Querétaro.

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While surveying breeding activity in the mainstem and a tributary of the French Broad River of western North Carolina (specific localities on file with the North Carolina Wildlife Resources Commission and withheld due to conservation concerns), we observed three separate events of egg consumption within 48 h by two species of fish and one crayfish. On 8 September 2018, a hellbender egg was dislodged from a nest with a guarding male hellbender (Fig. 1A). This egg floated into the water column and was swept downstream approximately one meter where it was intercepted and consumed by an unidentified juvenile chub (Cyprinidae). From 1045–1130 h on 10 September 2018, we observed two separate feeding attempts of both a juvenile crayfish species (Camarbus sp.) and two Rhinichthys atratulus (Eastern Blacknose Dace), each predating and consuming a C. alleganiensis egg. The crayfish grabbed a single egg with its chelipad and consumed the egg within ~10 min. (Fig. 1B). Two individual Eastern Blacknose Dace initially investigated a separate, single egg for several minutes. After disturbing the outer membrane and

Fig. 1. A) Cryptobranchus alleganiensis egg outside of nest immediately before being consumed by a Chub (Cyprinidae); B) Cambarus sp. (Crayfish) consuming C. alleganiensis egg; and C) Rhinichthys atratulus (Eastern blacknose dace) consuming egg of C. alleganiensis in French Broad River tributary, North Carolina.
dislodging the embryo, they consumed the yolk within ~10 min. (Fig. 1C). Our report conveys the potential importance of loose *C. alleganiensis* eggs in streams, which may provide valuable nutrient resources for aquatic organisms during the hellbender breeding season.

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**PLETHODON PUNCTATUS** (Cow Knob Salamander). **ARBOREAL BEHAVIOR.** A recent review on the climbing behavior of plethodontid salamanders (McEntire 2016. Copeia 104:124–131) reported that many *Plethodon* are facultatively arboreal. Here, we report observations of climbing behavior for *Plethodon punctatus*, a species of conservation concern that is only found on Shenandoah Mountain and Great North Mountain in eastern West Virginia and western Virginia.

While conducting field research on *P. punctatus* in the George Washington National Forest in spring and summer of 2018 (precise locations of observations withheld due to conservation concerns), we searched for individuals on the ground and on vegetation in 5 × 5 m plots, and opportunistically measured the height of salamanders (from the ground to the lowest part of the salamander) we detected above ground level in the study area. Out of 25 individuals observed in plots, eight were found climbing on trees, including a single observation of five *P. punctatus* climbing the side of a large multi-stem tree at 2200 h on 3 August 2018. We documented individuals at a mean height of 0.61 m and a maximum height of 1.9 m. We found *P. punctatus* climbing on *Acer pensylvanicum* (Striped Maple), *Acer rubrum* (Red Maple), *Acer spicatum* (Mountain Maple; Fig. 1), *Betula alleghaniensis* (Yellow Birch; Fig. 1), *Tsuga canadensis* (Eastern Hemlock), *Quercus rubra* (Northern Red Oak), and under the bark of dead standing trees. We did not observe *P. punctatus* on the leaves or stems of herbaceous understory vegetation. Our observations contribute to the knowledge of *P. punctatus* ecology, suggest that vertical structure could be an important foraging habitat component, and indicate that tree trunks should be searched carefully while surveying for this species.

This research was permitted by the West Virginia Division of Natural Resources (permit 2018.090), Virginia Department of Game and Inland Fisheries (permit 059581), and U.S. Forest Service (permit 2620), and approved by the West Virginia University Institutional Animal Care and Use Committee (protocol 1612004927).

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**ANURA**

**ADENOMERA HYLAEDACTYLE** (Napo Tropical Bullfrog). **PREDATION.** At approximately 2350 h on 13 October 2018 at the

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**Fig. 1.** *Plethodon punctatus* observed on trees in the George Washington National Forest, Pendleton County, West Virginia, USA: A) on a *Betula alleghaniensis* (Yellow Birch); B) on a pole-sized *Acer spicatum* (Mountain Maple).