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SHORTER CONTRIBUTIONS

DOCUMENTED INTERACTION BETWEEN AN AMERICAN CROW (CORVUS BRACHYRHYNCHOS BREHM) AND A CENTRAL RATSNAKE (PANTHEROPHIS ALLEGHANIENSIS [HOLBROOK])

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ABSTRACT

On 19 May 2025, a game camera deployed in Carroll County, Virginia documented an unusual interaction between an American crow (*Corvus brachyrhynchos* Brehm) and an adult central ratsnake (*Pantherophis alleghaniensis* [Holbrook]). In a series of three camera images (at 2-sec intervals), the crow flies into frame, lands, and ultimately makes contact with an adult ratsnake. The interaction appears to be one of aggression by the crow and possibly a predation attempt. While the outcome remains unknown, the interaction between two adults is rarely reported in the literature. We report this to serve as a baseline for other natural interactions between the species.

Keywords: game camera, images, potential predation, predator-prey defense.

As part of an effort to detect Allegheny Woodrats (*Neotoma magister* Baird) in Carroll County, Virginia, we deployed eight game cameras at a rocky outcrop on a private landholding (36.79899 °N, 80.90136 °W) from 16 May 2025 through 27 May 2025. The habitat is primarily a mixed deciduous-coniferous forest, with scattered rock outcrops, and with moderate understory vegetation dominated by great laurel (*Rhododendron maximum* L.). A first-order creek was <50m downhill of the outcrop where cameras were set, and the location was 1.3 km E of the New River.

At 15:27h on 19 May 2025 (27.2 °C, partly sunny, winds from NW at 22.5km/h), a game camera took a series of 3 images at 2-second intervals (Fig. 1). In the first times-stamped image, a

single American crow (*Corvus brachyrhynchos* Brehm) descended upon a rocky outcrop. In the second image, an adult central ratsnake (*Pantherophis alleghaniensis* [Holbrook]) appeared on camera, travelling along the base of the rock wall. In the third image, the crow appeared to harass or attempt to prey upon the ratsnake as it continued along the base of the outcrop. Because the camera was set to pause images for 1 min after the series of photos, no additional images or interactions were recorded. We, therefore, cannot conclude if this event was harassment or a successful predation event.



Figure 1. Series of game camera images at 2-sec intervals (time-stamped, left to right), depicting an interaction between an American crow (*Corvus brachyrhynchos*) and an adult central ratsnake (*Pantherophis alleghaniensis*) in Carroll County, Virginia, on 19 May 2025.

While not a new occurrence, this crow's harassment or predation attempt on a snake is uncommonly reported in the literature and an unusual capture on camera. In Caroline County, Virginia, Brittle & Brittle (2000) reported an American crow harassing a southern hognose snake (*Heterodon platirhinos* Latreille) but presumed predation attempts were halted upon observer approach. This hognose snake was reportedly 0.5 m TL (Brittle & Brittle, 2000); using crow size, the visible portions of the snake, and other habitat features, we estimate that our observed ratsnake is ca. 0.8 - 1.0m TL. While we found no additional references of American crows preying on snakes, *Pantherophis* spp. predation on passerine nests is commonly reported (e.g., Degregorio et al., 2016). Additionally, other *Corvus* spp. can successfully prey on snakes (Wiley, 2006) or harass or mob them (Schaefer et al., 2019). However, unlike this cited harassment scenario, our event lacked mobbing behavior. This may be a noteworthy shift in the dynamic between these two species. While the reason behind the imaged behavior remains inconclusive, documenting encounters like this helps deepen our understanding of how species interact and adjust to one another. Even brief observations can offer insight into the subtle dynamics that shape ecological communities.

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