

Predation of *Picus canus* Gmelin JF, 1788 (Grey-headed Woodpecker) by *Accipiter nisus* (Linnaeus, 1758) (Eurasian Sparrowhawk) in Chail Wildlife Sanctuary, Himachal Pradesh, India

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Survival is a critical component of life history that directly affects fitness (Clutton-Brock 1988; Moiron et al. 2020). Predation, as a selective force, significantly influences the fitness of prey individuals, as well as their community structure and population dynamics (Kullberg and Ekman 2003; Goodale et al. 2019; Meise et al. 2020). However, predation events are notoriously difficult to observe in real-time, necessitating data to assess how prey vulnerability mediates natural selection in prey populations (Krams et al. 2020).

The Eurasian Sparrowhawk (*Accipiter nisus* Linnaeus, 1758) is a major predator of smaller woodland birds (Krams et al. 2020). During winter, *A. nisus* serves as a keystone predator of small forest birds (Morse 1973; Perrins 1979; Krams 1996; Zawadzka and Zawadzki 2001). In a study by Krams et al. (2020), only 10% of attacks by *A. nisus* were successful, with success rates being influenced by the predator's position in the canopy. Attacks in the lower canopy were more frequently successful.

The Eurasian Sparrowhawk is both a resident and a winter visitor in the Indian subcontinent, breeding in Baluchistan and the Himalayas, and wintering in the Himalayan foothills and extending south to peninsular India. In contrast, the Grey-headed Woodpecker is a resident of the Himalayas, northeastern India and Bangladesh (Grimmett et al. 2011; eBird, 2024). Both species are listed as Least Concern under the IUCN Red List (BirdLife International 2016; 2021).

Predation attacks are poorly documented in Himachal Pradesh. The scarcity of documented predation events in the Western Himalayas more broadly, can be attributed to several ecological and behavioral factors. Dense forest cover and rugged terrain make direct observations challenging. Predation events often occur in secluded areas with limited visibility. Additionally, predation by raptors like *A. nisus* often involves swift, stealthy attacks, reducing the likelihood of human observation. Prey vulnerability, predator specialization and the cryptic nature of both predator and prey during such events further compound this difficulty.

The Eurasian Sparrowhawk, for example, relies heavily on surprise and agility, often striking from concealed perches, making real-time observations rare and it is supporting the assertion that "attacks are notoriously difficult to observe in real-time" (Krams et al. 2020). To contribute to filling this gap in Himachal Pradesh, on 08 December 2024 at 08:28 hours, during routine patrolling in the Khandam, Blossom Beat of Chail Wildlife Sanctuary (30°56'10"N 77°13'04"E, 1951 m a.s.l.), the first author observed an adult Eurasian Sparrowhawk with a recently killed adult Grey-headed Woodpecker near a road. The event occurred in a mixed oak-conifer forest. The prey, identified as *Picus canus*, was killed before the observer's arrival. Photographs were taken with a Nikon P950 camera (**Fig 1**). Upon noticing the observer, the Sparrowhawk flew away, carrying its prey. Such natural history observations are crucial for understanding predator-prey dynamics. This observation of predation on *Picus canus* in the Western Himalayas is noteworthy and adds to the limited documentation of such events in this region.



Figure 1. *Accipiter nisus* (Eurasian Sparrowhawk) with *Picus canus* (Grey-headed Woodpecker) catch Photo by: Sanjeev Sharma

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Conflict of interests

The authors declare that they have no competing interests.

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