



## Project description

### **Aspects of anti-predator behaviour in Simakobu monkeys, endemic to the Mentawai islands**

Traits that were adaptive under previous conditions may no longer have fitness benefits. However, some species still retain appropriate antipredator behaviors even though they do not coexist with the predators that their ancestors once faced. Studies have examined the responses of a variety of naive species to these predators, but none have specifically investigated whether naive primates retain antipredator behaviors against felid predators. We studied the pig-tailed langur (*Simias concolor*) to determine whether it still recognizes felids as predators even though dangerous felids do not exist on the islands on which it inhabits. The responses of the langurs to the playbacks of the vocalizations of felids (an ancestral predator), elephants (an unknown animal but not a predator), humans (a known predator) and, pigs and birds (known animals but not predators) were compared. Langurs fled more slowly and looked at the speaker less in response to the felid and elephant calls than they did in response to the human voices. Similar numbers of langurs fled in response to all playback treatments except the pig and bird. The results suggest that langurs are afraid of novel vocalizations but they have not retained specific acoustic knowledge of felid predator vocalizations. For long-lived species that have extended periods of learning, being able to modify general behavioral responses, such as antipredator behaviors, based on their individual experiences may be more adaptive than having fixed behavioral strategies.

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