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Challenge Grant Scheme,
Royal Society,
6-9 Carlton House Terrace,
London SW1Y 5AG

Dear Madam/Sir,

I am a senior scientist with the Wildlife Conservation Society, New York, which is an international organization dedicated to practicing science-based conservation. For the past three decades, my team and I have been committed towards studying threatened wildlife species in the Western Ghats of Karnataka, a global biodiversity hotspot. We are deeply involved in studying the meta-population dynamics of several species, including tigers, leopards and elephants. We then try to apply this understanding to shape policy and implementation in the arenas of species recovery and mitigation of conflicts between wildlife and growing human needs/economic development.

The ability to identify individuals within a species is central to the problem of understanding their population dynamics through temporal and spatially replicated samples of individuals. We have devoted significant efforts towards this in the past on tigers and other endangered species www.wcsindia.org. We have installed hundreds of automated digital camera-traps and collected large amounts of data in the form of the pictures taken from these cameras. For the focused problem of identifying tigers, and leopards (from unique striped patterns) and elephants (from shape and skin patterns), the current identification methods rely on manual input and involve clunky interfaces. A modern, efficient system with the capability of automatic classification of species with high reliability as will be invaluable to our efforts.

I have discussed these problems with Dr. Kartic Subr who, I understand, is submitting a proposal for a Challenge Grant on this theme. I am excited by the prospect of collaborating with him on his project entitled `CAT-SPATS: Crossmodal Analysis and Tracking of Spatio-temporal Statistics of Targeted Species' should he be awarded the funds. In particular, I will be happy to provide him with access to the necessary data and support under collaborative agreements. Through this focused 1-year project, I anticipate that we will establish collaborations on related themes going into the future.

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