

Case Report

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## Vehicular movements Vs Herpetofauna

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In the past two decades, socio-economic growth and development witnessed rapid urbanization, motorization, industrialization and migration of people (Gururaj, 2002) resulting leads to high pressure on natural ecosystem. In past few years abundance of motorization and high frequency of vehicular movement involving decrease the herpetofauna biodiversity particularly in forest region. Forest roads are acting as barrier to free movement of animals especially reptiles within the forest landscape, results mortality due to collision of vehicular movements (Van der Zande *et al.*, 1980; Forman & Alexander, 1998). The conservation biology research indicates value of the biodiversity; degradation ratio and possible action we need to implement for maintain the quality environment. Therefore we need to adapt strategies for biodiversity loss. As a conservationist taking to be concerned, not to disturb the integrity of the ecosystem, whenever creating research opportunities that should be make conservation and protection of living organism and its habitat.

Here reported road side snake mortality absorbed in Kolli hills forest region. I traveled on a public road which is passing through between Karavalli (N 10° 50'14" E 78° 41'46.3") to Solakadu (N 11° 18'31.0" E 78° 20'49.3"), Kolli hills, Eastern Ghats, Tamilnadu, Southern India. On 23<sup>rd</sup> October 2009 between 1000 to 1200hr by moppet, the weather conditions were cool, cloudy with occasional precipitation as it was the beginning of monsoon. Unfortunately one snake collision was observed by vehicular movements. As a conservation biologist try to document by the help of which I was kept my hand (GPS and Mobile phone) at the time of travelling with 21km up to Semmedu. Totally three death individual snake specimen documented due to vehicular movement at three different location N 10° 50'14" E 78° 41'46.3", N 11° 19' 30.6" E 78° 20'22.3" and N 11° 19'20.6" E 78° 20'35.1" respectively.

While returning on 29<sup>th</sup> October 2009 1100 to 2000hr by the same road, again observed another three dead individual specimen in following geographical locations N 11° 18'31.0" E 78° 20'49.3", N

11° 19'28.1" E 78° 20'25.8", N 11° 19'37.9" E 78° 20'09.2". Totally six snakes killed by vehicular collision on the road in various geographical locations (Figure 1). The road killed snakes are significantly in relation to increasing the vehicular movements on road were recorded particularly which is passing through reserved forests. Snake mortality had never been recorded by me during any attempts of the last one and half year because we are used to travel on the same road frequently almost one and half year. From this particular event says that the seasonal, diurnal variations studies should be initiated to evaluate, persistence direct snake mortality effect caused by vehicular collision. Other than that the road kills animal prevention or management strategies also to be constructed in detail.



Figure 1. shows Snake casualties due to vehicular movement at Kolli Hills (Eastern Ghats), Tamilnadu, India.

The state's responsibility with regard to environmental protection has been laid down under Article 48-A of Indian constitution, which reads as follows "***The state shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country***" and environmental protection is a fundamental duty of every citizen of the Indian country under Article 51-A [g] of the Indian constitution enjoins that "***It shall be the fundamental duty of every citizen of India to protect and improve the natural environment, including forest, lakes, rivers, and wildlife, and to have compassion for all creature***".

Therefore, everybody having responsibility to protect our natural environment, let us concentrate on natural ecosystem and its component (or) at least obey the environmental law and policies.

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