

Feeding ecology and conservation of the red-shanked doucs (*Pygathrix nemaeus*) at Son Tra Nature Reserve, Vietnam

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With the support of Primate Society of Great Britain, the ‘Son Tra Douc Research and Conservation Project’ was started. This project centers on the conservation of red-shanked doucs (*Pygathrix nemaeus*) on Son Tra Nature Reserve, Da Nang City, Vietnam.

Red-shanked doucs are one of the most striking and beautiful primate species in the world, called the ‘monkey of 5 colors’ locally. They are classified as endangered and suffer from hunting and habitat loss throughout their range. Although some data is available on the species distribution little is known on its ecology.

Son Tra Nature Reserve is a reflection of the conservation situation in the country. This forest patch is home to one of the largest remaining populations of red-shanked doucs in Vietnam. It remains relatively intact, considering it is close to one of the largest cities in Vietnam. However, hunting, habitat loss and habitat fragmentation are threatening the doucs and biodiversity on Son Tra.

This project gathers information about doucs social behavior, feeding ecology, ranging, and forest phenology. This study found that doucs live in multi-male multi-female families. Groups consist of multiple families, which have a daily and seasonal fission-fusion pattern. The sex ratio of adult females to adult males is typically 2:1. Care taking of

infants is done primarily by the mother, although adult males provide direct and indirect care taking benefits. This project

identified 62 different feeding plant species. Doucs feed on a variety of plants, mainly trees but also vines and climbers. Nutritional analysis of select food and non-food items is pending. However, doucs tend to select higher quality foods based on availability. This suggests their dental and gut morphology is an adaptation to fall-back foods.



Part of a family from the habituation group showing (left to right) an adult female with newborn infant, alpha male of the family, and a subadult male.

This project also monitored the numerous threats to biodiversity on Son Tra. Illegal activities including hunting, fishing, timber and non-timber forest extraction are documented. Although this project does not have a direct law enforcement component, data on illegal activities is regularly provided to the protection authorities and the knowledge of these activities is beneficial for the protection of the doucs.

Development of several tourist resorts and roads have serious negative impacts on biodiversity of Son Tra. Roads are fragmenting the forest into small blocks, and the doucs as most other arboreal wildlife cannot cross many of these roads due to the amount of forest removed and the steepness of the slopes created. This project assisted in receiving the government's approval for a natural tree canopy bridge project which will connect forest patches. It also campaigned to halt road widening of existing roads on Son Tra but with limited success.

Finally, this project has an education component. Work with several governmental departments and Da Nang City consultant to raise awareness about the red-shanked doucs, Son Tra Nature Reserve, and the threats have resulted in two exhibitions. There are plans to continue a school based mobile exhibition, and expand the school curriculum to include Son Tra and the doucs. A VTV2 film has been produced on the Son Tra doucs and this project.



Road construction on Son Tra is massive. This photo shows a small slope being cut into the forest. Doucs are not able to cross these large roads with exposed slopes. You can also see how vulnerable the doucs are, in some areas groups have been separated by road construction.