

Conserve dholes & save them from the brink of extinction!

A glimpse of dhole conservation in Kangchenjunga Conservation Area, Eastern Nepal



Nepali name: BAN KUKUR, BWasO

English names: Dhole, Asiatic wild dog

Scientific name: *Cuon alpinus*

IUCN status: Endangered, CITES- Appendix II

Population: Decreasing, 949 - 2215 mature individuals

Distribution: Central, South and Southeast Asia

OVERVIEW OF THE SPECIES:

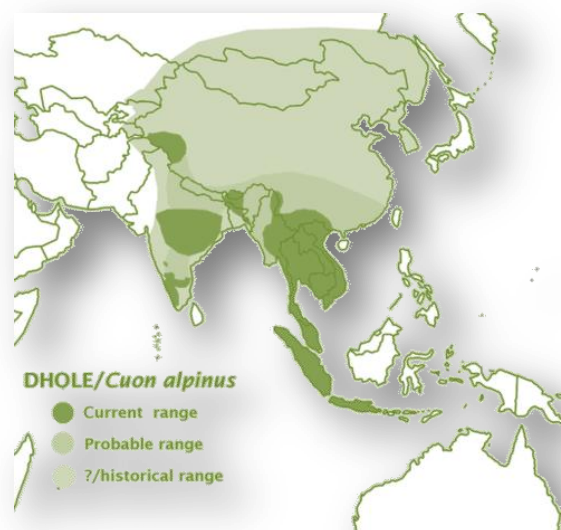
The Dhole or Asiatic wild dog (*Cuon alpinus*) is one of the most threatened members of the **Canid** family. Around the world, 34 other species including foxes, wolves and jackals belong to this family of Carnivores and inhabit every continent except Antarctica.

Like other species of dogs, dholes are **highly social animals**, living in hierarchical **packs** of 5 to 10 individuals on average, sometimes with lower or higher densities depending upon prey availability and the type of ecosystem they inhabit.

Dholes exist in a **variety of habitats** ranging from tropical rain forest to deciduous-dry forest, open plains and alpine steppe.

Dholes are **efficient predators** and often hunt in packs to take down larger prey. Their diet consists of **different sized prey** ranging from rodents to gaurs. Although their preferred quarry is deer (40-60kg), they can also feed on wild boar, monkeys, scavenge or even fruit and vegetables. Dholes also prey on livestock if they are encountered in their habitat, thus causing conflicts with local communities leading to **retaliatory killing**.

Other prime threats are **habitat loss, depletion of natural prey base, disease transmission from domestic dogs and competition with other predators** such as snow leopards, wolves, tigers and leopards.



Map showing the current, probable and historical ranges of dholes (Source: Wikimedia Commons)

Over the last century, dholes have **disappeared from more than 75% of their historic range** which initially extended from Russia to Singapore. They now live in fragmented populations across 11 countries in Central, South and South-East Asia. According to the IUCN Red List only about **949 to 2,215 breeding dholes** are left in the wild. As the overall population continues to decline, dholes are now categorized as **Endangered**.



Interesting facts

- ♦ There is usually one dominant monogamous pair in the pack, called the “alpha pair”
- ♦ The entire pack contributes to the care, protection and feeding of the pups and the nursing female
- ♦ They are one of the very few species that allow pups to feed first
- ♦ Females have more teats than other Canids and can produce up to 12 pups per litter
- ♦ They have some amazing vocal calls – they can whistle, scream, mew and even cluck like a chicken
- ♦ They are excellent swimmers and often drive their prey into water
- ♦ They are not very fast but they have a high endurance and can chase their prey for a long time
- ♦ When hunting as pack dholes can subdue prey over 10 times their body weight and can even fend off tigers



Dhole picture: ©Anand P.



Why should we conserve dholes?

Dholes are **key predators** in the ecosystem: they help with the **regulation of prey**. Without them:



- Prey numbers will boom, thus increasing the risk of human-wildlife conflict due to **crop raiding**.

- The **balance of the ecosystem and its biodiversity would be affected**. Some predators would thrive and some species could go extinct due to a chain reaction.

Dholes are **endangered** and **their main threats are all caused by humans**. We are the only ones who have the power to help this species. Wild dogs have inhabited these habitats long before humans and it's our moral obligation to ensure their survival into the future



Even if they now exist in the shadow of other species such as tigers or snow leopards, dholes have the **potential to be charismatic species in their own right**, like their close cousin, *Lycaon pictus*, has in Africa. They could become a potential draw for **eco-tourists** and thus for the economy of local people.



Dholes are the **last representative of the Genus Cuon** in the Canid family. If they go extinct, an entire portion of evolutionary history will be lost forever.



Dholes play an important role in ecosystems and contribute to biodiversity. This amazing species is **a heritage we should not deprive the next generation of**.



Dholes – like all species – are worth more alive than dead. We should be proud to share their habitat.





CONSERVATION:

Dholes are **legally protected** in all countries they occur in, under CITES – Appendix II (2013). However law enforcement needs to be strengthened to ensure their protection as many of their range countries fail to address it. More conservation projects need to include dholes in their long-term strategies, to improve their studies to include an estimation of their densities as well as the ecology of this **poorly known species**.

In Nepal the dholes' range extends from tropical forest (Terai PAs) to Alpine meadows (high mountain PAs and corridors) from eastern to western parts of the country. However even though their range is wide and they are present in several PAs, their conservation is confined to just a few PAs. The dhole population is estimated as low (250 -750 individuals) in Nepal. The dhole project in eastern Nepal is focused on understanding more about the integral role of these unique dogs in the ecosystem engaging local communities - so that we can show they are more valuable alive than dead.



Kangchenjunga Conservation Area Project

Situated in north-eastern Nepal, Kangchenjunga Conservation Area (**KCA**) is a community managed conservation area of Nepal. KCA (2,035 sq km) was established in 1997 and declared a *Gift to the Earth* by the government of Nepal in support of the WWF living campaign. Dholes, snow leopards and other carnivores inhabit this area and have triggered numerous conflicts with humans. The loss of livestock (e.g yaks, goats etc.) represents serious economic damage for the owner, sometimes leading him/her to respond with retaliatory killing (mostly through poisoning) of the predators. As the number of dholes plummeted, the need to **promote a sustainable existence between local communities and dholes** arose.

In 2005, the Nepalese government, in collaboration with WWF Nepal, initiated a **community managed livestock insurance scheme (CMLIS)** in the Lelep, Yamphudin and Wolangchung Gola villages of KCA but all three were dedicated to the mitigation of human-snow leopard conflict only.

*A year later the Nepalese government entrusted the management responsibility of KCA to local communities establishing the Kangchenjunga Conservation Area Management Council (**KCAMC**) in 2006.*

In 2010 Mr. Ambika Prasad Khatiwada first studied dholes in KCA for his M.Sc. degree in forestry. Mr. Khatiwada and his team collaborated with KCAMC to establish three new CMLIS in Tapethok, the lower belt of Lelep and Yamphudin in 2013. Out of three, two are dedicated to dholes and one is for dholes and snow leopards. Communities showed their enthusiasm towards CMLIS as it provides relief funding for the affected herders if dholes and snow leopards kill their livestock. Thus it helps in preventing retaliatory killing of the important carnivores. 170 households/herders included their 926 livestock in newly established CMLIS to date.

The achievements are the result of team member's hard work, communities/KCAMC/government collaboration and of course the generous support of People's Trust for Endangered Species, Rufford Small Grants Foundation, National Geographic and Snow Leopard Network.

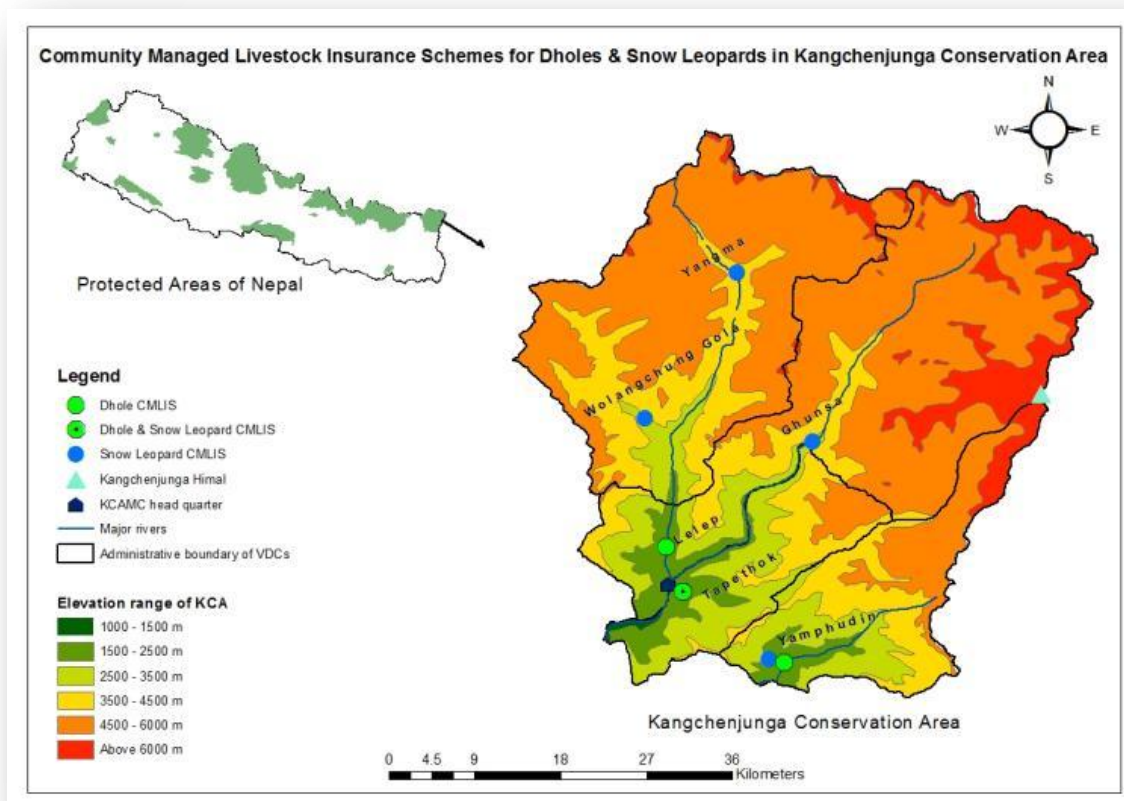




More about the CMLIS:

The insurance schemes for livestock have been **designed and developed in collaboration with the communities** themselves, are **self-sustaining and locally managed**. Basic training was provided for record keeping and effective administration of the CMLIS. This project has contributed NPR 300000 (three lakhs) as endowment fund to each newly established three CMLIS.

- Local herders contribute a minimum amount to the **common fund** when they join the scheme.
- Each CMLIS makes a provision that the fund earns interest to be **used for relief funding** in times of need. **Loans** can also be taken from the fund for **community investments**.
- Both **preventative and curative** mitigation measures are set up, including campaigns of conservation awareness, improvements to herding and vigilance to reduce livestock loss (e.g. use of corrals and scaring devices), and the establishment of veterinary services. Community-based monitoring of snow leopards, dholes and their prey are also conducted.
→ All those measures have the potential for income generating activities and thus CMLIS becomes **economically viable**. The benefit of sharing funds amongst subsistence herders' communities acts as a positive tool towards conservation.
- A community-based **verification mechanism** for assessing any claims is established, thus limiting frauds (for which herders could be expelled from the scheme).



Map showing the location of 7 CMLIS in KCA (2 for dholes, 4 for snow leopards, and 1 for both species)



Perspectives for the future:

- A few more years are needed to **pursue the guiding and building of local capacity in the management of CMLIS** in order to ensure their resilience and self-sustainability. For example proper record keeping of CMLIS (applications, relief fund distribution, financial transactions) and technical capacities on the monitoring of dholes/snow leopards and their prey base through transects needs to be well managed to guarantee an effective administration and the success of the programme itself.
- Improvements to the insurance scheme are in progress to **better meet herders' needs**. Indeed the owners are requesting **higher amounts** to compensate their livestock losses. Plus they would like the scheme to also **include kills from other predators** (e.g. wolves, black bears, common and clouded leopards).
- A **livestock vaccination programme** should be included in the CMLIS in order to address livestock diseases, another important threat to the herders' economy.
- This programme **needs to be scaled up** to cover a larger landscape in the region covering the south east and western part of KCA. Yamphudin CMLIS has already proposed to initiate dhole conservation work in Kalikhola, Surumkhim and Khebang areas where human-dhole conflicts have accelerated in last few years.
- **Landscape level conservation initiatives** are needed as dholes and snow leopards are high ranging species.
- Finally, more robust **monitoring** needs to be conducted to **assess the success of those measures** on dhole/snow leopard populations. Both community based conservation programmes and scientific monitoring of populations are important.

Conclusion:

Through the CMLIS program, awareness raising activities and research work, villagers and herders in KCA started to **understand the importance of dholes in the area** and they are more hesitant now about poisoning and carrying out any illegal activities that would harm the predators.

This programme contributes to the conservation of biological diversity in the area while ensuring improvement in the livelihoods of local communities. **A win-win approach which helps promote sustainability for communities, dhole and snow leopard populations is sought.** Conservationists and villagers now have all the cards in hand to make it happen and should distribute them to a larger extent.



Picture of two dholes from the camera trap survey in 2012 in KCA

Dhole conservation work of KCA in pictures



← Beautiful mountain view from KCA



Livestock rearing is a major occupation of local communities in KCA. The milk candy called « churpi » is a major product. →



← Wolangchung Gola village of KCA



Basic training for CMLIS
In Yamphudin →



← Meeting with herders and CMLIS
in Tapethok



Photo session after a meeting of CMLIS
in Lelep →



All pictures: ©Ambika Pd. Khatiwada

DHOLE'S CHECKLIST	
Latin name	<i>Cuon alpinus</i>
English name	Asiatic wild dog or Dhole
Nepal name	BAN KUKUR or BWASO
Order	Carnivora
Family	Canidae
IUCN status	Endangered
CITES status	Appendix II
Population status:	Decreasing population trend. Estimated population is 949 – 2215 mature individuals in the wild
Population size and densities	Population estimates of dholes are not available for any country. An attempt has been carried out to estimate the total population by classifying countries within their current distribution as having high (1,500-3,000), medium (750-1,500), or low (250-750) numbers of dholes. These classifications were based on estimates of relative abundances and area covered by dholes within each country. One country is classified as having a high number of dholes (India), two countries with medium numbers (Thailand, Myanmar), six countries with low numbers (Bhutan, Cambodia, China, Lao PDR, Malaysia, Nepal). The total estimated population of dholes is 4,500–10,500
Habitat	Usually forest (deciduous-dry, moist deciduous, tropical rain forest), also meadows & steppe
Distribution	Native: Bangladesh; Bhutan; Cambodia; China; India; Indonesia; Lao PDR; Malaysia; Myanmar; Nepal; Thailand Regionally extinct: Afghanistan; Kazakhstan; Republic of Korea; Kyrgyzstan; Mongolia; Russian Federation; Singapore; Tajikistan; Uzbekistan Possibly extinct: Vietnam
Diet	Almost exclusively meat: usually deer, but also wild boar, hares, some time domestic livestock - depending on availability
Dental formula	Its dental formula is unique among the dog family: Incisors 3/3 : Canines 1/1 : Premolars 4/4 : Molars 2/2
Body length	≈ 100 cm
Tail length	≈40 cm
Weight	Females 12-16 kg; males 14-18 kg
Coat color	Usually a red coat (also brown, yellowish or grey) often with white front & belly, black tail
Gestation period	≈ 63 days
litter size	1-12 pups
Breeding season	November - April (<i>most births in December in India</i>)
Longevity	At least 15 years in captivity
Sexual maturity	≈ 1 year old
Activity pattern	Diurnal/crepuscular, occasionally nocturnal

