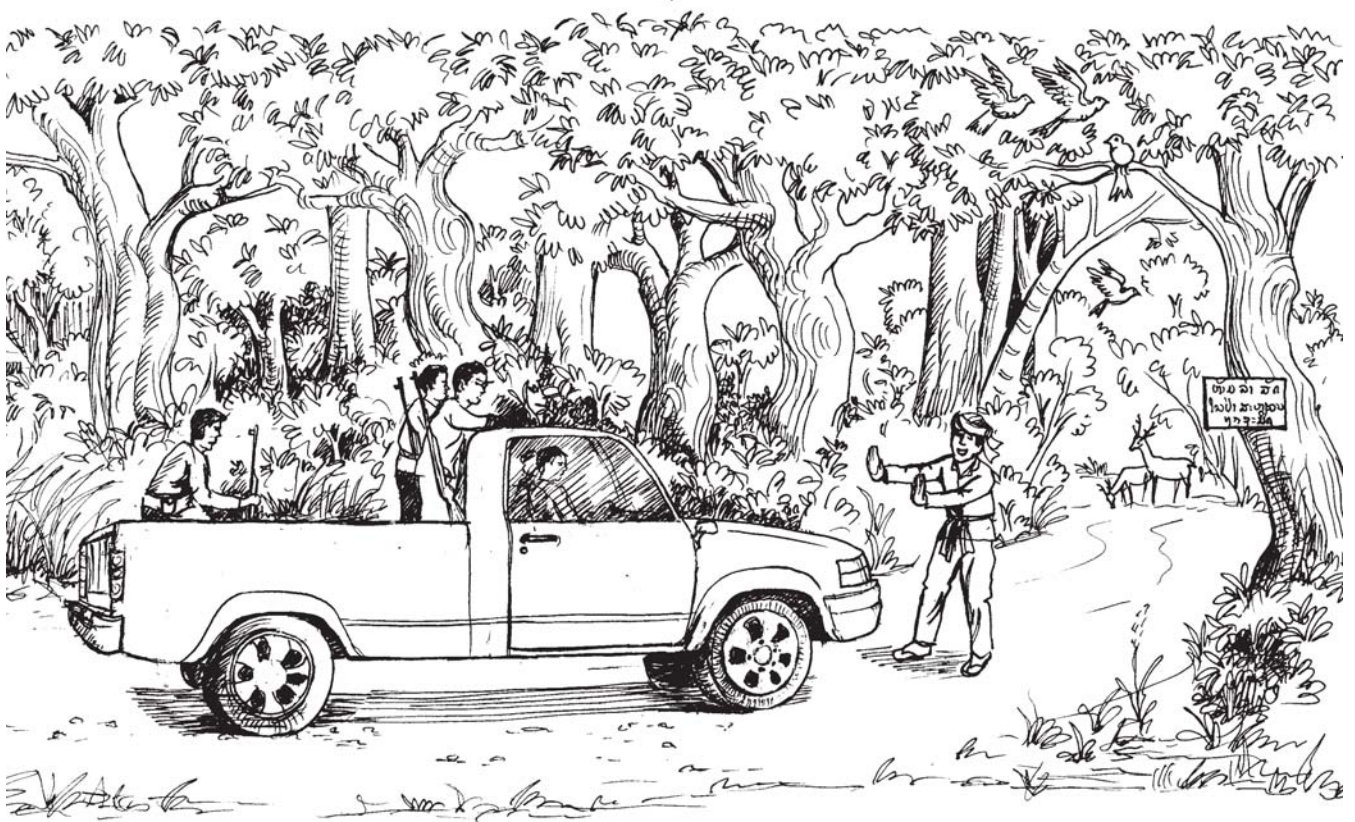


# Managing Hunting and the Wildlife Trade



This article expands on the information found in the WCS survey, described in the article "Wildlife Hunting and Use".

Poverty alleviation and forest management policies in Laos aim to reduce unsustainable rates of wildlife hunting and trade while increasing rural food security. However, many species continue to decline in the uplands, a trend which affects not only biodiversity, but also threatens the nutritional status and future livelihoods of villages around National Protected Areas (NPAs).

The Wildlife Conservation Society (WCS) conducted household surveys in 24 villages near the Nam Ha NPA in Luangnamtha to evaluate the harvest, consumption, and trade of commonly used mammals, birds and reptiles. Results were compared with national policy for achieving sustainable harvest rates of managed species alongside food security. It was found that to arrest the decline of larger animals in northern Laos and assure the availability of wild meat for rural livelihoods in the future, several management actions are needed.

## Managing wildlife trade and illegal hunting by outsiders

### 1. Wildlife trade



Most of the animals included in the WCS study are traded to some degree. Given the illegality of trading wild animals and the reluctance of households to discuss it, what was reported probably represents a very conservative estimate of the scale and extent of the trade. This is a rural livelihoods concern for several reasons:

- Wildlife trade directly violates national policies for poverty alleviation by extracting common animals designated for sustainable use as food by village residents.
- It contributes to the decline of animals that are already over harvested, making sustainable use more difficult and unlikely to be achieved.

- Illegal trade of restricted species reduces animal populations that are already rare, including unique animals with potentially high long-term economic value. Animals such as primates and hornbills could be attractions for nature-based tourism, a potentially important source of revenue for upland villages near protected areas.

### Recommendations

- Support efforts to block or control access by outside trucks and motorbikes along existing roads and on tracks to the interior of protected areas. Avoid construction of new roads and tracks in these areas.
- Encourage efforts to make the public aware that trading wildlife anywhere in the uplands is counter to government policies for poverty alleviation and threatens both rural livelihoods and the viability of the nature-based tourism industry. Aim education campaigns at wildlife buying urban populations with disposable income, and disseminate information at wildlife markets and at road check points.



- Support efforts to increase the frequency of enforcement in urban markets and road checkpoints to stop sale of all animals. Although the sale of common animals, such as squirrels, bamboo rats, pheasants, partridges and songbirds, is often thought of as harmless, results from this study suggest that these are most important for village consumption.

## 2. Hunting by outsiders

Despite regulations that limit hunting in NPAs to village residents only, 40% of households surveyed reported that outsiders hunt in their village areas. Hence, the extent of wildlife harvest recorded in the survey represents only a portion of the total wildlife harvest in these areas. New roads and tracks into previously inaccessible regions enable outsiders to hunt (and buy) wildlife. Elsewhere in Laos, roads are associated with the increased sale and eventual decline of NTFPs, having greater negative impacts on families that are already poor and underprivileged (Chamberlain et al. 2002). Creating more access for motorised traffic invites outside hunting into the final frontiers of protected areas, making it harder for government staff and villagers to effectively enforce existing wildlife regulations.

## Recommendations

The steps outlined on the previous the page will also limit hunting by outsiders. In addition, the local authorities can:

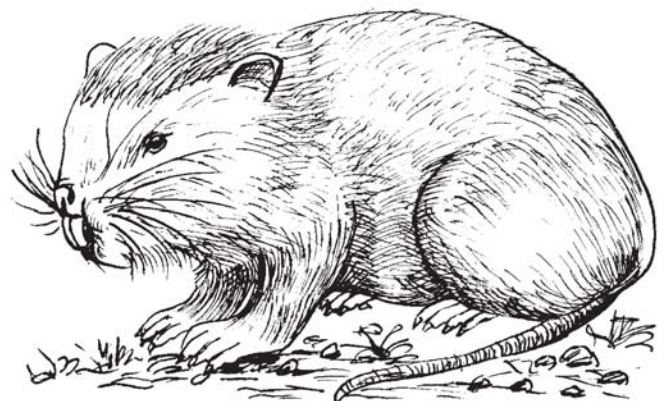
- Support efforts to educate the public (through sign posting and mass media) about the location and boundaries of protected areas, and on who has rights to legally hunt in management zones.
- Encourage efforts to strictly enforce the ban on hunting by outsiders in protected areas as stated in MAF 0524.

## Managing hunting by NPA villages

### 3. Hunting seasons and zones

Hunting pressure for most animals is highest from September to March. This is also the period when upland rice harvest food shortages occur (September-October), when farmers are in the fields harvesting (October-December), and a period of free time (December-February) that precedes forest cutting (February-March) for new upland rice plots (NAFRI 2003; and data from this study). Hunting in September and October, and for frogs in May and June, is outside of the six-month period (November-April) during which hunting is legally permitted under MAF 0524.

Given the opportunistic nature of hunting and the use of wildlife for food and medicine, it is difficult and unrealistic to stop hunting of common (controlled and uncontrolled) species during the prohibited season, especially during rice shortages. Even if domestic livestock are available at this time, villagers will probably hunt wildlife and reserve domestic animals for sale when cash is needed. As most villagers prefer wild to domestic meat, they will very likely hunt even when domestic animals are available, unless hunting regulations can be enforced by local authorities.



## Recommendations

- Due to the importance of some common animals (small squirrels, bamboo rats, bulbuls) for food security, it may be more realistic to limit hunting by geographic location rather than by season. This would allow some harvest of common animals by villages in NPA management zones throughout the year, while increasing efforts to strictly enforce hunting bans on all animals within NPA core zones. The hunting ban on restricted species needs to be enforced at all times in all areas.
- The role of wildlife in rural food security in Laos is not well documented or understood. Recent nutritional studies (see papers by Clendon and Krahn in this publication) suggest that wild meat still plays a critical role in rural diets. More detailed information on the type, frequency and quantities of

wild meat consumed in villages, relative to other sources of protein, needs to be collected to guide wildlife management strategies in protected areas.

## 4. Hunting methods

Despite ongoing gun collections in NPA villages over the years, guns are still the most common hunting method, prominent in the capture of larger rare animals often reported as declining. Guns in NPA villages include an array of unregistered homemade muskets as well as semi-automatic AK47s issued to village militia. As in other areas, government issued cartridges for village militia weapons are altered to change the solid lead bullet to lead shot, and are reloaded and reused (Hansel, in press). In addition to guns, a wide variety of specialised snares are employed for hunting ground birds, and terrestrial and volant mammals.



## Recommendations

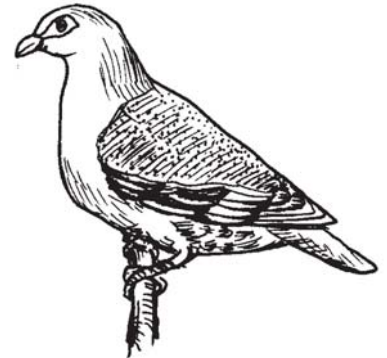
- Gun collections should be continued and their frequency increased. Gun control is not likely to threaten village food security since the most frequently eaten animals are captured by snares or other methods. Efforts should focus on villages that actively sell animals or that report outsiders hunting, as these activities pose the most immediate threats to rural livelihoods and biodiversity conservation. Stronger efforts should be made to confiscate guns from anyone at any time in protected areas.
- The use of village militia weapons for hunting probably poses a greater threat than muskets, since when reloaded with lead shot they are more effective in hunting larger rare animals and small animals. Closer management of village militia weapons and ammunition is needed to ensure that they are not used for hunting in protected areas.
- Gun collections alone will not limit the extent of hunting of many animals (especially terrestrial birds and mammals). It is possible that use of snares will increase if guns are effectively limited. Therefore, strict delineation and enforcement of the core zone protection areas where hunting is prohibited will be critical in assuring effective animal refuges.
- Snares do not discriminate in prey selection and can inadvertently trap rare and restricted species. In order to determine how large a problem this is, hunting with common snares, such as long fence line noose snares (*heo pan*) and log drop snares (*heo tham*), should be evaluated to identify the frequency of types of animals caught. Likewise, snare types should be reviewed to determine which pose a threat to restricted species and to species under some degree of risk. For example,

specialised snares for capturing bears (*heo mii*) and trip wire spear or gun traps (*heo hao*) used to kill large mammals should be prohibited. Since the latter can also easily injure a human, their use also poses a threat to NPA visitors.

## The future

No guidelines currently exist to help government staff or villages to know if harvest of controlled species is within sustainable limits. To determine sustainability, ongoing information is needed on the abundance, harvest and use of controlled and heavily utilised animals. A priority for research and monitoring is information on the status and use of frequently hunted animals, including pheasants, partridges, pigeons, civets, and small ungulates. This information should be used to design and adapt village wildlife management plans that will assure population viability and availability of these animals as a food source for the future.

More enforcement is needed in urban centres and villages around protected areas to stop the hunting and use of restricted species. These animals are under some degree of risk in Laos or are globally threatened, and were commonly reported as decreasing in abundance. If the recommendations made in this paper are carried out and adapted after further research, villagers in and around NPAs should be able to continue harvesting enough wildlife to maintain their traditions and balanced diets, while also conserving animal species for future generations.





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This paper is adapted from: "Wildlife Hunting and Use in Luangnamtha Province: Implications for Rural Livelihoods and Biodiversity Conservation in the Uplands of the Lao PDR" in *Poverty Reduction and Shifting Cultivation Stabilisation in the Uplands of Lao PDR: Technologies, approaches and methods for improving upland livelihoods*. NAFRI. 2005.

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*Improving Livelihoods in the Uplands of the Lao PDR* was produced in 2005 by NAFRI, NAFES and NUOL.