# The Ethnography of Captive Elephant Management in Nepal: A Synopsis

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#### Introduction

In 2001, with the help of my research assistant Satya Man Lama, I embarked upon an anthropological study of captive elephant management in Nepal. This has been a long-term programme of ethnographic research entailing participant observation. semi-structured interviewing, survey photographic documentation, data, historical investigation, and textual translation. My doctoral fieldwork additionally involved my own apprenticeship as an elephant handler at the Khorsor Elephant Breeding Center in Chitwan, where the handlers explained that I could never understand their life and work unless I experienced it for myself. Khorsor is also the site at which we shot the documentary film Servants of Ganesh, which concerns the training of a juvenile elephant called Paras Gaj (Dugas & Locke 2007).

As a social anthropologist, I had been surprised that regional traditions of captive elephant management had not yet been subject to ethnographic investigation. For elephants retain considerable religious, symbolic and even politico-economic significance in South and Southeast Asian countries, where ancient traditions of animal husbandry remain important for modern purposes of elephant utilization. I found support for the rationale of this programme of research in Richard Lair's book (1997), in which he writes: "The scientific and technical disciplines of biology, forestry, veterinary medicine, animal husbandry, and law are obviously essential in managing domesticated elephants. Less obviously, the crucial caretaking function performed by mahouts and owners requires the entry of humanities such as social anthropology, as well as more arcane subjects such as comparative religion, social history, linguistics, etc".

Nepal may not have seemed like the most obvious choice of location for this ethnographic kind of research, since its captive elephant management practices are not nearly as well known as those of India, Sri Lanka, Myanmar, and Thailand, and perhaps also since the number of captive elephants is so small (236 registered as of 2011). However, the presence of the government elephant stable, or sarkari hattisar, as an integral component of the national parks and wildlife reserves of Nepal's lowland Tarai region, and the Khorsor Elephant Breeding Center at which captive born elephants are trained, made Nepal a particularly attractive field site. Since 2001 I have made four successive research trips totalling 20 months of fieldwork. In what follows, I introduce the world of Nepali captive elephant management and briefly summarize a few of the key issues I have addressed in my research.

### The hattisar and the use of captive elephants

The government elephant stables were the primary focus of my doctoral research. They are the location for a community of expert practitioners with a culturally distinctive occupational subculture. Rituals of sacrificial appeasement and veneration are an important part of stable life, especially at Khorsor with regard to elephant training, which entails a period of separation and disciplined clean-living for the principal trainer and his elephant (Locke 2007). Ritual and institutional life in the sarkari hattisar is shaped by Tharu tradition, even though this ethnic group indigenous to the formerly malarial Tarai no longer exclusively staffs the stables of today. Originally sponsored by the Kings of Nepal, and recruiting Tharu men through networks of kinship and community, the stable was the location for the capture of wild elephants for trade and tribute. Later, during the rule of the Ranas from the mid 19th to mid 20th centuries, the *hattisar* was maintained to facilitate royal hunting expeditions (*rastriya shikar*), at which foreign dignitaries were hosted to hunt tigers, rhinos, leopards and bears (Locke 2008, 2011). Then in the 20th century, Nepal's captive elephant management apparatus was deployed in service to the new agendas of conservation and tourism.

As a result, the *sarkari hattisar* became an organ of the Department of National Parks and Wildlife Conservation (DNPWC) within the Ministry of Forestry. Since the early 1970s, the era of the national park, captive elephants have been used for anti-poaching patrols, large mammal monitoring, conservation programmes, and also nature tourism. However, it was the Tiger Tops safari resort in Chitwan that first offered tourists the opportunity to view tigers, rhinos and other wildlife from elephant back. Established by John Coapman in 1963, Tiger Tops preceded the establishment of the (Royal) Chitwan National Park in 1973, and maintained close relations with the elephant staff from the government stables.

Today, whilst government elephants are available for the use of tourists at some of the *sarkari hattisar*, which have become tourist attractions in their own right, the majority of the jungle elephant ride business is managed by the private sector, mainly in Chitwan, operating either in the community forests of the buffer zone, or for the few resorts with special licences, inside the park itself. In Chitwan, this has led to two parallel elephant-keeping traditions; one based on the Nepali three-man care system, the other, at the resorts in the gateway town of Sauraha, based on the Indian two-man care system (Hart & Locke 2007).

### Ranks and roles in the Nepali elephant stable

In Nepali government stables (Fig. 1), as well as the Chitwan facility of the National Trust for Nature Conservation (NTNC), and those few safari resorts with park privileges and sizeable stables, each elephant is ideally tended by a three-man care team. This comprises a *mahut*, or stable cleaner, a *patchuwa*, or grass-cutter, and a *phanet*, or elephant driver. Closely related to the

Hindi term *phandi*, the contemporary *phanet*, as chief of an elephant's care staff derives from the historical *phanet* as an elephant capturer.

Of course, Nepal exhausted its stocks of wild elephants for capture long ago, and as a signatory to the Convention on International Trade in Endangered Species (CITES) since 1975, Nepal is prohibited from purchasing elephants from abroad (although there have been gift exchanges of rhinos for elephants from India, Thailand, and Myanmar). This lack of legally available elephants necessitated a captive breeding programme to sustain Nepal's population of working elephants (private owners who procure elephants from the Sonepur Mela and elsewhere in India circumvent this legal obstacle by arranging for elephants to be 'gifted' in exchange for a cash donation). This was initiated with the founding of the Khorsor Elephant Breeding Center in 1986, which has had an impressive record of success since its first birth in 1991. In fact, as a result of the number of juvenile elephants awaiting training, Khorsor now facilitates the training of two elephants at a time. Thus, whilst wild elephants are no longer captured, at Khorsor the phanet can still play a similar role in the training of captive born elephants. To be a phanet who has successfully trained a juvenile elephant is a prestigious achievement.

Whilst a *phanet* outranks a *patchuwa* and a *mahut*, he is not the sole driver of an elephant. A *patchuwa* is named after his primary function, which is the task of cutting grass or branches from trees from inside the parks and reserves



**Figure 1.** Misty winter morning at Khorsor.

of the Tarai, typically part of the early morning *hattisar* routine (Fig. 2) preceding daytime grazing between the hours of 10 am and 3 pm. This may entail him taking on driving duties with the assistance of his *mahut*, leaving the stable at dawn whilst the *phanet* helps prepare the men's morning meal.

A new *mahut* will begin his apprenticeship by assisting the senior elephant handlers or hattisare, with menial tasks like the preparation of dana (known as kuchi in India), which are grass parcels containing unhusked rice, salt and molasses given as nutritional supplements and as instruments of reward for reinforcing good behaviour (Fig. 3). It is significant that the word dana refers to a religious gift, for in some sense the hattisare are feeding a god (the elephant representing an instantiation of the Hindu deity Ganesh). With regard to a mahut's duties it is important to appreciate that over time the basic responsibilities of everyday elephant care are shared between the members of the ranked team of mahut, patchuwa and phanet; they all drive an assigned elephant.

The *hattisar* is of course more than merely an aggregate of elephants and their handlers. Above the *phanet* come the managerial ranks of the *hattisar*. In the contemporary stable, a *raut* may be considered the chief of the elephant handling teams, but historically the term referred to the overseer of elephant capture operations. Discharging this duty for the state could lead to royal recognition and grants of land, enabling



**Figure 2.** Elephant staff returning to the hattisar after grass-cutting duty.

some Tharu men to rise to the class of landlord, above tenant farmers and landless labourers in the stratified society of the Tharu (Locke 2011).

Above the *raut* comes the *daroga*, whose responsibilities are traditionally akin to his superior the *subba*, or stable manager. As one's *hakim*, or boss, one must show deference to one's *subba*, who is responsible for the discipline of staff, the health of elephants, communications with the veterinarians and wardens of the DNPWC, and the provisioning of food and resources for both humans and elephants. A *tekhadar*, or contractor, arranges to supply this food, and a stable may also have a *khardar*, or administrative officer, responsible for issuing salaries and keeping records.

Nepal's government stables exist in a network, including remote jungle patrol posts to which elephant-handler teams are assigned. As such, and bearing in mind its previous administrative autonomy before it was incorporated into the DNPWC, the sarkari hattisar has traditionally also had a co-ordinating officer, the adikrit subba, or head of the elephant section. Earlier in the 20th century there were two adikrit subbas, one for the west and one for the east, but after the retirement of Sabilal and the death of Tapsi, it was decided to continue with just one adikrit. First came Ram Lotan, who drove the elephant Prem Prasad on the occasion of the coronation of King Birendra and Queen Aiswarya in 1975 (for a photo see WWF Nepal 2003), and then Bhagu, already famed as 'the king's mahout' after saving King Mahendra's life from a tiger attack whilst hunting. In his retirement Bhagu was later rewarded with the title ajivan subba, or 'subba-for-life'.

The current *adikrit subba* is Rameshwor Chaudhary, Bhagu's successor who has almost 40 years experience as a *hattisare*. Adapting the practices of training wild-caught elephants to captive-bred elephants, he has played a significant role in the successes of the elephant training programme at Khorsor, which in 2009 made the news around the world for the birth of the twin male elephants Ram and Laxman.

### An enclaved community in a total institution

From mahut to subba, professional and social life in the *hattisar* is ordered according to this system of ranks. Life revolves around the keeping of elephants, in a space where the professional and the personal, the public and the private are not clearly separated, and in which low status handlers are expected to act with deference to their high status superiors from the DNPWC. Primarily staffed by the Tharu ethnic group whose Tarai home was always at the periphery of the Nepali state, until 1964 they were legally designated masine matwali, or 'enslaveable alcohol drinkers', the third in a system of five ranked castes incorporating 'twice-born' Hindus, 'tribal' groups, and 'untouchables' (Höfer 1979; Guneratne 1999).

This history of standardized inequality continues to inflect social relations today, with the result that the relatively low-status handlers constitute what I call an enclaved community. It is enclaved because its members are both spatially separated and socially segregated. They are unified by their subservient condition even as they are internally differentiated according to their own institutional hierarchy (Locke 2007). As a regimented institution then, the hattisar represents what the sociologist Erving Goffman (1961) calls a total institution. It is total because virtually all aspects of daily life are conducted in the same place under a single authority, because most members' activities are conducted in unison with their colleagues, and because each phase of the day's activities are subject to a daily routine. Finally, it is also a total institution because the activities of the *hattisar* derive from a rational plan designed to meet the objectives of the ruling institution (the DNPWC).

# Textual traditions of elephant knowledge

The role of the state as a ruling institution mobilising men to care for captive elephants is indirectly evident throughout South Asia in the genre of literature known as *gaja sastra*, which is concerned with the anatomy, behaviour and husbandry of elephants. Elephants were originally used as a weapon of war (Kistler 2005), and



**Figure 3.** A *phanet* makes *dana* for his elephant in the morning.

continued long after to serve as a symbol of regal power for the traditional South Asian polity. As such, their management has been an important aspect of statecraft requiring expert knowledge. The gaja sastra records this knowledge. There is a remarkable continuity in the content and rhetorical form of these texts throughout their various redactions. From Sanskrit texts like Nilakantha's Matanga-Lila (Edgerton 1931) and Palakapya's Gaja Sastram (Wakankar & Mhaiskar 2006), through vernacular versions in Bengali and Assamese, to my own discovery of an early 20th century Nepali veterinary treatise, it is significant that they at least partially represent a codification of handlers' practical knowledge (Locke 2008).

Despite the rhetorical flourishes that garnish these works, and an elaborate eight-fold scheme of elephant castes probably restricted to textual discourse, they nonetheless display evidence of a knowledge that can only derive from prolonged experience spent in close proximity to elephants. This argument, that the *gaja sastra* represent a textual systematization of orally transmitted knowledge systems was first made in Franklin Edgerton's *The Elephant Lore of The Hindus* (1931).

### Learning and regulation

Whilst the *gaja sastra* contain veterinary knowledge and descriptive schemes that bear a very close resemblance to the practical knowledge

George Sanderson reported for handlers in 19th century India (1878) and that I encountered in 21st century Nepal, didactic learning and instruction plays a minimal role for elephant handlers' own acquisition of skills and knowledge, and literate pedagogy even less. Authorities have not just sought to codify knowledge deriving from typically non-literate handlers, but also sometimes to more directly regulate their practice. In Nepal such efforts have been only weakly evident through new recruit induction programmes, an unsupported plan for a hattisare conservation education programme, and frequently mooted hattisare training programmes. These becoming ever more likely as INGOs take an increasing interest in Nepal's captive elephant management, which senior handlers themselves are, in principle, positively disposed towards. In India and Thailand, mahouting manuals have been developed (Namboodiri 1997; Phuangkum, Lair and Angkawanith 2005), which are indicative of a concern to ensure that elephant care practices are subject to quality control.

However, whilst there are some explicitly didactic aspects to an apprentice's education, it is participation in a community of practice that remains most important in Nepali elephant handling (Lave 1993; Wenger 1998). What this means is that a novice, under the scrutiny of his masters, acquires an increasing degree of handling competence by progressively and repeatedly attempting the tasks of elephant care (Fig. 4), a process of integration into a community of expert practitioners beginning with what Lave and Wenger (1991) term 'legitimate peripheral participation'. Over time, as a novice is judged to be mastering the skills for basic tasks whilst repeatedly observing and assisting in the performance of others' duties, he is allowed to attempt more demanding tasks on his own.

A novice will not only acquire discursively amenable knowledge, such as a vocabulary of command words or the names of flora edible for elephants, and practical skills for maintaining elephant gear, but also habituated skills of bodily comportment and human-elephant interaction. What is perhaps most distinctive about apprenticing as an elephant handler though, is

that it is not just about mastering skills, but also about mastering a relationship. Getting to know your elephant is crucial, and will mark you as the person of a particular elephant, with consequences for how other elephants treat you, depending on the relationships of amity and enmity within the community of elephants.

### **Human-elephant relations**

Whilst Nepali elephant handlers obviously conceive of differences between the social orders of humans and elephants, they also maintain cultural conceptions about the complex interrelations and similarities between them. For Nepali hattisare, human-elephant relations are influenced by a cultural tradition that accords elephants a sacred status, by social experiences of inter-species intimacy, and by the contradiction of keeping animals captive that are also conceived as divine and human-like beings, even if they feel the elephants generally seem to willingly collude in their captivity. What one finds then is that elephants are variably accorded three types of status, which articulate with three kinds of relational modality. Handlers relate to elephants as animals through a modality of domination; to elephants as persons through a modality of companionship; and to elephants as gods through a modality of devotion. Only the modality of companionship is balanced, the others place human and elephant in converse relations of inequality, making a handler paradoxically a superior master in one, and an inferior devotee in another. In representing elephants as animals, persons, and gods, handlers variably emphasize



Figure 4. Cutting Narayani Kali's toenails.

one over the other depending on contingent scenarios of engagement.

At this point it will be helpful to very briefly indicate how these modes of identification relate to these modes of engagement in the practices and representations constituting the handlers' humanelephant life-world. Thus for example, we find the elephant's animality emphasized in the language of didactic instruction by which masters explain to apprentices the basics of driving and disciplining elephants, a context in which the instrumentality of acquiring task proficiency leads to forms of discussion in which elephants are represented as mere animate machines. Handlers sometimes also speak in the modal register of domination in the interior of the hattisar, off-duty and away from the tethered elephants that surround them, whilst talking, for example, about maintaining control over a disobedient male elephant during musth. The animality emphasized through instruction and idle chat is in tension though with the relation of companionship that develops through the interactive bodily comportment between man and elephant that plays such a large part in their daily routine. The acquisition of skill for an elephant handler is ideally about mastering a relationship through the development of intimate and reciprocal bonds, a situation that frequently led my informants to remark "elephants are people too". At other times such companionable egalitarianism is avoided in favour of attitudes of reverent worship. Many handlers, for example, upon mounting their elephant will touch the flank with the first two fingers of the right hand before then touching their forehead and their chest, just as one does when anointing oneself after performing a sacrificial ritual to the gods (puja). An informant explained that this was the hattisare way of acknowledging the elephant's divinity and requesting the goodwill of Ganesh whilst riding his incarnation.

### **Elephant training**

Not since 1970 have mature elephants been captured from the wild for training in Nepal. Later, during the 1990s, Khorsor became the site for a systematic programme to breed and train elephants, which were no longer available

from the diminished habitats of the Tarai. A longstanding tradition of skilled practice with wild adult elephants was adapted to the captive-born juveniles now necessary for maintaining Nepal's government elephant population. Rameshwor Chaudhary's prior experience training a juvenile elephant at the Koshi Tappu Wildlife Reserve in 1978 was significant for establishing the conventions of contemporary elephant training at Khorsor, which currently boasts 20 elephants (2 of which received training in early 2011), plus 5 untrained juveniles.

In the social world of the hattisar, elephant training (hattiko talim) is not just a technical procedure with the objective of producing an elephant responsive to human control. It is also experienced as a transformative rite of passage for the principal trainer and their elephant trainee, which involves the entire human-elephant community. A three-stage model can be discerned in Nepali elephant training that follows the anthropological scheme of separation, liminality, and re-integration (Van Gennep 1960; Turner 1969). These phases are ritually marked, they engage the divine forces understood to control the natural and animate world, and integrate conceptions of the sacred with skilled practices.

Separation entails the removal of the juvenile elephant from its mother, ideally at the age of three years. This can be quite distressing for the mother, whose child is roped up to an adult male and taken to graze in the morning after the hattisare have taken the first of their two daily meals. Upon its afternoon return, the juvenile is led to a special training post called a kamari at the perimeter of the stable. This has been ritually purified and sacrificial rituals are conducted to appease the potential wrath and solicit the good will of the forest goddess Ban Devi and the local area god Bikram Baba, both Tharu deities. For these carnivorous deities pigeons, chickens, a female and an uncastrated male goat are given, whilst for the vegetarian and pan-Hindu Ganesh, it is fruit and sweets. The participating community of hattisare then eat the sanctified leftovers or prasad, which are understood to now contain the grace of the gods. Park officials also sometimes attend these ritual events and take prasad.

The trainee elephant and its principal trainer are now in a liminal state, meaning that they occupy a ritually-marked threshold between a former and a prospective state, residing away from the other men and elephants. The trainer must maintain a disciplined state of ritual purity to help ensure the success of the training. For the trainer this entails ascetic living, avoiding meat, alcohol and the presence of women (especially if they are menstruating), whilst the elephant should be kept away from metal, a manufactured substance alien to the natural environment of the gods in which training is conducted.

The trainer will either cook his own food or take it before the other men, eating apart and washing his own utensils. In the interests of purity, ideally the trainer will also fabricate rope versions of the usually metal portions of the elephant driving gear, specifically the *kasni*, a chain around the elephant's neck, and the *mathiya*, the rings that attach the chain to the *atargal*, the string stirrups through which a driver places his feet. This demonstrates commitment and respect to the elephant whose divine nature must be supplicated.

Once this new state of affairs has been established, driving training can begin (Fig. 5). This consists of daily sessions during which the juvenile learns to accept a rider armed with a pair of sharpened bamboo sticks, and which involves it being roped up to two training elephants. In India these elephants are known as *koonki*, but in Nepali more typically just as *talim dine hatti*, meaning 'training giving elephant'. These sessions instil in the juvenile an understanding of the expectations associated with particular verbal and tactile commands, for basic operations such as sitting, standing, going forward, going left and right, holding, pushing, spraying and so on.

During my research, I found a repertoire of 25 widely understood verbal elephant commands, although a great deal is accomplished by more subtle tactile means, primarily involving the use of the driver's toes behind the elephant's ears. Driving training involves a mixture of both negative and positive reinforcement – reward for a command understood and performed is known

as 'giving trust' (bishwas dine), often entailing a pat on the head, soothing, congratulatory talk, and even a smear of dirt (which protects the elephants' sensitive skin from biting flies which can draw blood).

In addition to these daily driving training sessions, each evening the elephant is subject to a ritualized conditioning exercise involving the whole community of hattisare. The aim of these sessions, which involve singing, massage, and the use of fire torches, is to symbolically incorporate the elephant into the community of handlers and elephants, and to make the elephant lose its fear of potentially disturbing sensory experiences: human touch, human crowds, loud human noises, and fire (Fig. 6). Similarly, driving training concludes with the elephant being taken into urban zones of dense human population. Even though a Nepali government elephant will spend most of its working life in the forested and riverine environments of the national parks and wildlife reserves, it is important that they are trained to cope with all possible work duties, which might include ceremonial occasions in urban environments.



**Figure 5.** Paras Gaj receiving driving training...



**Figure 6.** Paras Gaj initially distressed by training ordeal.

Evening training sessions are ritually marked in that they commence and conclude with religious songs honouring the gods. The tone is of joyous celebration as handlers crowd around the elephant, rubbing its skin, sitting on it, clambering underneath it, all the while laughing and joking as they sing. This is partly precipitated by the way that normal protocols of decorum are temporarily suspended; once the introductory reverential hymns have been sung, the songs take on a bawdy nature that subverts propriety. The most popular song I have witnessed at Khorsor concerns a man having sexual relations with the wife of his *subba* (sung in his presence!). These sessions represent a temporary negation of normally configured social relations. This subversion of usual stable manners and elephant etiquette propels everyone into a liminal or 'inbetween' state of what anthropologist Victor Turner (1969) calls communitas. This basically refers to a heightened experience of solidarity produced by ritual events that temporarily suspend the norms of social life. The normal state of affairs (both with regard to behaviour towards one's colleagues and superiors, and the trainee elephant) is reinstated as the singing concludes with songs of religious respect.

Training is completed within two to four weeks depending on the elephant's learning ability and willingness to submit to being ridden. The concluding phase of re-integration is then marked by a second set of sacrificial rituals after which the trained elephant takes a place back among the other elephants at its own post. The elephant has attained a new status and is now ready to perform the same duties as its mature elders. The principal trainer has been inducted into that special elite of handlers who can claim to have tamed an elephant (albeit with the moral support and practical assistance of the wider community of *hattisare*).

#### **Further developments**

More recently, my research interests have turned to development interventions in Nepali captive elephant management and to the political economy of elephants in Chitwan nature tourism. Over the last seven years Khorsor has seen the construction of improved infrastructure and a visitor center featuring photographs from my doctoral research. There have also been two projects involving collaboration between the Nepali authorities and foreign NGO partners. These are the Humane Elephant Training Programme begun by the WWF and continued by the Working Elephant Programme of Asia (WEPA), and the Elephant Tuberculosis Programme supported by Elephant Care International (ECI). Subsequent to my most recent fieldtrip early in 2011, I am now endeavouring to establish a Nepal Elephant Handler Foundation that aims to provide welfare support and additional training for the hattisare who are ultimately so crucial to conservation in the national parks of Nepal and their attendant tourist economies.

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#### References

Dugas M & Locke P (2007) Servants of Ganesh: Inside The Elephant Stable. One World Films, Octapixx Worldwide.

Edgerton F (1931) The Elephant Lore of The Hindus: The Elephant-Sport (Matanga-Lila) of Nilakantha. Motilal Banarsidass, Delhi.

Goffman E (1961) Asylums; Essays on The Social Situation of Mental Patients and Other Inmates. Penguin, London.

Guneratne A (1999) The modernising matwalis: Caste, class and status among the tharus of Chitwan (trans.) H. Kuloy. In: *Nepal: Tharu and Tarai Neighbours*. Skar HO (ed) Biblioteca Himalayica, Kathmandu. pp 159-173.

Hart L & Locke P (2007) Nepali and Indian Mahouts and Their Unique Relationships With Elephants. In: *Encyclopedia of Human-Animal Relationships: A Global Exploration of our Connections With Animals. Vol.* 2. Bekoff M (ed) Greenwood Publishing, Westport. pp 510-515.

Höfer A (1979) The Caste Hierarchy and The State in Nepal: A Study of The Muluki Ain of 1854 Himal Books, Kathmandu.

Kistler JM (2005) *War Elephants*. University of Nebraska Press, London.

Lair R (1997) Gone Astray: The Care and Management of the Asian Elephant in Domesticity. FAO Regional Office for Asia and the Pacific (RAP), Bangkok.

Lave J (1993) Situated Learning in Communities of Practice. In: *Perspectives on Socially Shared Cognition*. Resnick LB, Levine JM & Teasley SD (eds) American Psychological Association, Washington DC.

Lave J & Wenger E (1991) Situated Learning: Legitimate Peripheral Participation. Cambridge University Press, Cambridge, UK.

Locke P (2007) History, Practice, Identity: An Institutional Ethnography of Elephant Handlers in Chitwan, Nepal. Ph.D. thesis, University of Kent, Canterbury, UK.

Locke P (2008) Captive Elephant Management, The Tharu and The Nepali State. *International Institute of Asian Studies Newsletter* **49:** 14-15.

Locke P (2011) The Tharu, The Tarai and the history of the Nepali hattisar. *European Bulletin of Himalayan Research* **38:** 59-80.

Namboodiri N (ed) (1997) Practical Elephant Management: A Handbook for Mahouts. Elephant Welfare Association, Kerala.

Phuangkum P, Lair R & Angkawanith T (2005) Elephant Care Manual for Mahouts and Camp Managers. Forest Industry Organisation, Thai Ministry of Natural Resources and Environment & Food and Agriculture Organisation of The United Nations, Regional Office for Asia and The Pacific (RAP), Bangkok.

Sanderson GP (1878) Thirteen Years Among The Wild Beasts of India: Their Haunts and Habits From Personal Observation; With An Account of The Modes of Capturing and Taming Elephants. Allen & Co, London.

Turner V (1969) *The Ritual Process: Structure and Anti-Structure*. Aldine, Chicago.

Van Gennep A (1960) *The Rites of Passage* (trans.) Vizedom M & Caffee G. Chicago University Press, London.

Wakankar SY & Mhaiskar VB (2006) *Maharsi Palakapya's Gaja Sastram with Sanskrit Commentary*. Bharitya Kala Prakashan, Delhi.

Wenger E (1998) Communities of Practice: Learning, Meaning and Identity. Cambridge University Press, Cambridge, UK.

WWF Nepal (2003) Hattisars: Managing Domesticated Elephants in Nepal. WWF Nepal, Kathmandu.