

English names for a world list of mammals, exemplified by species of Indochina

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ABSTRACT

1. The lack of a globally accepted list of English-language names for mammal species leads to various problems stemming from the reduced ability to communicate unambiguously. This impacts directly on their conservation. We use the larger mammals of Indochina to exemplify the use of an explicit set of principles designed to provide each species with a unique and non-misleading (or at least minimally so) English name.

2. For most species, a suitable name is already in use, sometimes generally so. For species for which multiple names are in use, standardization would consist of adopting the most suitable name. Only for a very few species are all extant names so unsuitable that a neologism should be coined. One species, *Panthera pardus*, presents potentially insoluble problems.

3. Name standardization among the world's birds has generated some controversy, but this has not led to abandonment of the process. Much can be learned by those developing a similar process for mammals, through studying the bird-naming process. Progress can be advanced by detractors indicating whether they oppose standardization *per se*, the principles used or the names resulting from application of the principles. Also, proponents of standardization should always emphasize that the purpose of the process is to produce a list available for those who want to use it, not to produce a binding selection that must be used in all circumstances.

Keywords: Cambodia, Laos, name standardization, vernacular names, Vietnam

INTRODUCTION

Linnaean scientific nomenclature assigns each species a unique name, and assists biological communication between people lacking a common language or even alphabet. These names and their use are governed by a precise and regularly revised set of articles and recommendations, for animals the International Code of Zoological Nomenclature (ICZN, 1999). This system can provide stable nomenclature, because name-bearing types allow objective resolution of what each name refers to, and names are not changed without good reason. Professional biologists rapidly become proficient in scientific nomenclature. Most of the world's known species of animals, plants, fungi and micro-organisms are referred to only by biologists, but a small subset (particularly among flowering plants, butterflies, fishes, birds and mammals) are also discussed by non-biologists. Linnaean binomial nomenclature is off-putting to many laypeople, because of the unfamiliarity and difficulty of pronunciation of the names (most words are Latinized, and many come from Latin or from Ancient Greek), and the perception that there are all sorts of opaque rules. When non-biologists need to refer unambiguously to a given species, many tend to feel more comfortable using their own language.

A unique name for each species, accessible to laypeople, is more than a procedural nicety. Many categories of laypeople need a stable system of precise, non-technical names for species (Pine, 1993), ranging from customs officers and lawmakers to exhibition curators, media commentators, and teachers and their students. A pressing need for standardizing English names is in the training of wildlife surveyors and conservationists in countries with evolving conservation authorities, who must learn many novel concepts for even basic proficiency. It is an extra burden to have individual animal species going under different names in different books. During the 1990s in Laos, it was not unusual (see codings in Duckworth *et al.*, 1999) for the three illustrated mammal identification books in wide use (Prater, 1971; Lekagul & McNeely, 1977; Payne, Francis & Phillipps, 1985) each to use a different English name for a given species. Sometimes a fourth name appeared in the only comprehensive book giving identification details (Corbet & Hill, 1992). English names are important in public perception of animals and thus are essential for flagship species (Bowen-Jones & Entwistle, 2002). Understanding the natural world, and the concomitant desire and ability to conserve it, will be advanced if laypeople have access to a stable and unique English-language name for each species.

English is closer than any other language to a global vernacular. Because many people using it are not native speakers, accessibility should be an important consideration in English-language name issues. Weight should be placed on the misconceptions that a particular name might lead to: in particular, for words with multiple meanings, it is rash to assume that non-native speakers would be aware of, and consider, all of them when encountering the word in a species name. The need for accessibility also means that presentational rules should be as simple as possible. Not all who commented on drafts of this paper shared these views: some placed a higher value on linguistic pedigree, and urged that the views of those for whom English is a foreign language should not shape the usage of first-language speakers. While we do not expect the English language as a whole to be so influenced, we do see an argument to expect this with recommended English names for animals. We discuss here English-language names for mammals, but similar principles apply to names in other languages (or 'common names', or 'vernacular names': but these terms are inappropriate because the names of most species of mammal in use today were not produced through common or vernacular processes; Parkes, 1975).

Murphy & Ehrlich (1983) opposed entomologists trying to standardize English names, stating that gardeners, birders and other lay public are at home with scientific nomenclature. But, contra Murphy & Ehrlich (1983), most birders do not habitually use the names '*Vireo*' and '*Junco*'. They use 'vireo' and 'junco', and for particular species, for example, 'Dark-eyed Junco' and 'Red-eyed Vireo', not '*Junco hyemalis*' and '*Vireo olivaceus*'. Once this disinclination is recognized, most of the arguments Murphy & Ehrlich (1983) presented against English names (e.g. that many in current use are non-global, non-unique, misleading, artificial, etc.) become instead arguments for provision of more appropriate English names. Despite Murphy & Ehrlich's (1983) urgings, Miller (1992) soon published a list of English names for North American butterflies, and in 1992, the North American Butterfly Association formed a committee on English names. They published a complete list, based on explicit selection policies, for the butterflies of North America (NABA, 1995). Laypeople's increasing interest in animals means the use of English names will continue to grow. It is impossible to

¹The topic of this paper concerns English names and their presentation, and for clarity it is necessary that the text departs from current *Mammal Review* editorial policy by capitalizing significant elements of species names (see 'Presentation and additional points on the use of English names').

imagine a TV documentary referring to '*Arctictis*' and '*Cynocephalus*', and we believe it greatly preferable if the narrator refers to ' Binturong' and ' colugo', rather than to 'Bearcat' and 'flying-lemur' (they are neither felids nor prosimians). Even in scientific journals. English names can be problematic. For example, when discussing monophyly of gliding sciurids, Thorington (1984) called anomalurids (known not to be closely related to sciurids) 'the scaly-tailed "flying squirrels"', needing punctuation marks to make clear that his use of the term 'flying squirrel' did not include the 'scaly-tailed flying squirrels'. It seems odd to have an English name that needs specific punctuation to avert an erroneous impression.

The diversity of origin and current usage of English names generates various problems. One name may designate unrelated species, for example, 'Elk' for *Alces alces* in British English but *Cervus elaphus* in American. Different names may indicate the same species, for example, 'Puma', 'Cougar', 'Mountain Lion' and 'Catamount' for *Puma concolor*. Even a unique name may give a misleading impression. The Bearcat is not the only cat with a prehensile tail, because it is not a cat at all. Overhearing group conversations at zoos and museums is a good way of appreciating the variety and frequency of misinterpretations about animals that English names can cause. For these and other reasons, we urge the provision of a rational and globally unique English name for each mammal species.

The abundance of amateur birdwatchers means that birds' English names have received far more attention than have names for any other group: for example, Cheesman & Oehser (1937), Eisenmann (1955), King, Woodcock & Dickinson (1975), Parkes (1975, 1978), RAOU (1978), AOU (1983), Sibley & Monroe (1990), Dowsett & Forbes-Watson (1993), Beaman (1994), and Inskipp, Lindsey & Duckworth (1996). English names for birds may stabilize in the foreseeable future, through the process commissioned by the International Ornithological Congress. Standardization has progressed further in the French language (CINPO, 1993) than it has in English. This has not been easy, and those working with English names for mammals can learn a lot from the development of bird names. Concerns among the very laypeople for whom standardization is intended (e.g. Kemp & Munn, 1988; and appended editorial comment) can apply to mammal names as well. Objectors clearly resent losing 'their' familiar names, not considering that if 'their' names are proposed for world-wide use, others will lose 'theirs'. Many objectors have not travelled much, and so have not contended with the confusion resulting from the use of non-unique or misleading names. These lay opponents also feel that nobody should 'impose' names upon the rest of the world. We concur; globally stable and appropriate names are proposed merely for those who may wish to use them. These may be compilers of lists (e.g. related to international treaties, red lists, taxonomic checklists), editors of journals, and Internet discussion groups. Individuals should use whatever name they wish. For example, many names unique at the global level are unnecessarily long in a local context, and when used in the latter, can sensibly be shortened. 'Fox', 'Badger' and 'Otter' are widely used in Britain for *Vulpes vulpes*, *Meles meles* and *Lutra lutra*, where there is only one species in each group; but these names are not suitable the world over, where there are many species each of fox, badger and otter. It is unrealistic and unhelpful of British people to object to globally unique names (which might be Red Fox, Eurasian Badger, and Eurasian Otter) being made available for such species. Objectors also consider names a part of culture, not to be driven by 'faceless' principles, but most mammals' English names were constructed as artificially as were scientific names. In response, proponents of standardization have detailed species-by-species justifications for proposed names, for example, Beaman's (1994) checklist for Palearctic birds. Jones, Carter & Genoways (1975) stated that 'there is... no formal system of vernacular nomenclature for mammals. Rather, such names gain acceptance through usage and this list attempts to reflect those currently in use'. This passive attitude

will not help make English names more informative and useful in the future. There is no reason for authors of mammal checklists merely to follow. They can and should lead. In the UK, general usage for some birds changed within a decade (e.g. for *Perdix perdix*, from 'Partridge' to 'Grey Partridge'), when it was advocated by leading popular periodicals. We do not suggest that zoologists replace their use of scientific names with English ones (see Murphy & Ehrlich, 1983), but that they use their knowledge to propose appropriate names for non-zoologists to use. The selection of newly coined English names for Thai plants in Radanachalee & Maxwell (1994), littered with scatological, lewd and blasphemous allusions, is an extreme example of what may happen when there are not readily available names.

Some less emotive issues weigh against name change. National laws may use English names for wildlife species. Both English and scientific names are given for most species listed in the Indian Wildlife (Protection) Act 1972, but only the English is used for some. Policy and management documents often use English names. Amateur naturalists in many countries play a valuable role in monitoring the status of wildlife, and generally use native-language, not scientific, names. Therefore, any change in these names may temporarily reduce the efficacy of important conservation activities. Offenders may exploit the confusion: the Mumbai High Court recently secured a conviction through only the English names in Salim Ali's *Birds of India* (N. Jamdar *in litt.*, 2001). These arguments favour careful name standardization to allow future stability. Without international standardization, the current inconsistency between and within countries [e.g. differing names between CITES (Convention on International Trade in Endangered Species) outputs and national legislation] will continue to generate problems. When changes are made, the general public needs appropriate information to relate unfamiliar English names in laws and other documents to their previously used ones.

Mammals, particularly larger ones, have a lay profile as wide as that of birds. Animal names such as 'Tiger', 'leopard' and 'Elk' are familiar to many northern hemisphere children, although few realize that there is only one species of Tiger but several of leopard, or that their peers on the other side of the Atlantic are referring to a totally different elk. Attempts at global standardization of English-language mammal names have been limited, but are increasing. Sokolov's (1984) world list lacked names for many species, but had multiple names for others. The current standard world list of mammalian species (Wilson & Reeder, 1993) lacks English names, but is under revision and the third edition will include them (D. E. Wilson *in litt.*, 2000). A draft list of English names (Wilson & Cole, 2000) provides a starting point for third edition section authors (D. E. Wilson *in litt.*, 2000). Corbet & Hill's (1991) world list provided English names for many species; but in the following year the same authors (Corbet & Hill, 1992) often used different names. Some thought has been given to the matter for mammals of the USA and Canada (Jones *et al.*, 1997; and previous editions). In Australia, early European settlers gave names to many marsupial forms, for example, 'cat', 'mouse' and 'wolf', because of convergent resemblance to placental cats, mice and wolves. Many of these names have been replaced, following the Australian Mammal Society's carefully considered guidelines of 1980 (Strahan, 1983, 1995). Little thought has been given to other areas, notably Asia. Harrison & Quah's (unpublished but privately circulated) list for Malaysian mammals was influential, but many names lack global context, and various of the less satisfactory names were not used for Bornean mammals by Payne *et al.* (1985). Production of a popularly accessible list of larger mammals of Laos (Duckworth *et al.*, 1999) forced selection of appropriate English-language names, and precipitated this discussion paper.

The present paper considers mammals of Cambodia, Laos and Vietnam (Indochina *sensu* Delacour, 1940), excluding Muridae, Insectivora and Chiroptera. Poor understanding of species limits in these groups makes proposing an English name for each 'species' premature.

Wilson & Cole (2000) also had problems among these animals. Moreover, laypeople are less aware of species limits in these groups, especially because many species are identifiable only by specialists. The remaining Indochinese mammals (here termed 'larger mammals', for convenience) serve as an example of selecting English names by using explicit criteria. Our ability to propose the 'best' name is limited because we are considering only a subset of the world's larger mammals, and undesirable names for extralimital species constrain our choices (see *Macaca arctoides* and porcupines). NABA (1995) also felt restrained by not covering all world species at one review.

We are not proposing any names unconditionally: experience from bird name standardization shows that to arrive at that stage needs wide consultation. Wilson & Cole's (2000) principles for mammal name selection disregard some important lessons learned through bird names, where different endeavours used various combinations of principles, not always explicit. These are synthesized below. Some general lessons are: (i) the need for clearly stated principles, allowing dissatisfaction for a name to be attributed to its failure to follow these principles, or to the principles being inappropriate; (ii) the public's general disinclination to learn unfamiliar names (although they usually attribute this to other causes), meaning that preserving well-established names is desirable; (iii) the need for wide consultation, especially in regions with poor representation on the proposing body; and (iv) deference to current usage within the native range of species.

METHODS

Larger mammals known or suspected potentially to occur in Indochina are listed, using species limits from Corbet & Hill (1992). Extensive taxonomic discussion would obscure the exercise in applying English names, but the gibbon taxon *siki* is regarded as a race of *Hylobates leucogenys*, not of *H. gabriellae* (Geissmann, 1995), and *Sus bucculentus* is considered a valid species, not questionably synonymous with *S. verrucosus* (Groves *et al.*, 1997). Original descriptions are cited for species discovered subsequently.

Most English mammal names comprise a group name (e.g. 'squirrel') with a modifier (e.g. 'Variable'). Group names may be hierarchical, for example, 'squirrel', 'flying squirrel' and 'giant flying squirrel' indicate progressively narrower groupings within the rodents. Modifiers may be lacking for taxonomically isolated species, for example, *Orycteropus afer* 'Aardvark', or for species with long-standing lay familiarity and a unique name, for example, 'Tiger'.

English names in eight sources (Prater, 1971; Lekagul & McNeely, 1977; Payne *et al.*, 1985; Corbet & Hill, 1991, 1992; IUCN, 1996; Zhang Y.Z., 1997; Wilson & Cole, 2000) are evaluated, provided that the taxonomic unit is the same as in Corbet & Hill (1992). Where species limits differ, the name may not be listed. For example, Lekagul & McNeely (1977) recognized only one species of goral, but Corbet & Hill (1992) concluded that there are several, so Lekagul & McNeely's (1977) name 'Goral' is not evaluated here. Nowak (1999) is not included, because English name application was inconsistent within species and it was often unclear whether a name signified a species or a group of species. Other recently used names are included as appropriate. A set of principles was derived, mostly reflecting work with bird names, and each name was evaluated against these.

PRINCIPLES FOR SELECTION OF NAMES

A rigid prioritization of principles for selecting English names is impossible, but our perception of importance is indicated in the text for each. An over-riding principle is the desire for names to be as accessible as possible to people whose first language is not English. No merit

NAMES PROPOSED FOR INDIVIDUAL SPECIES

The name favoured for each species, following application of the above criteria, is in bold face. Rejected alternatives follow. Widely used names are asterisked (*), but only when no more than two are in significant current use for that species. Species in square brackets are not confirmed to inhabit the region. This includes all domestic animals, because there is no firm evidence of feral populations. Major disadvantages of each name, selected or rejected, are indicated by superscripted reference to the principle number in the list below. 'S' indicates a serious drawback generally sufficient to reject the name; 'D', a drawback generally sufficient to reject a name for an extant alternative; and 'M', a minor drawback generally sufficient to reject the name only if a widely used alternative exists, or if several operate on one name, or if the name itself is little used (so modification will cause only slight inconvenience). The disadvantages are:

^{1,1}less widely used than an alternative, and suffering greater drawbacks (S); ^{1,2}variant of similar name, but in less widespread usage (note: 'Asiatic'/'Asian' not listed; see principle 4b iii) (D); ^{1,3}less widely used than an alternative even though suffering similar or fewer and/or other less serious drawbacks (M); ^{1,4}apparently a neologism.

^{2,1}also a group name and so needs a modifier (S); ^{2,2}use of this name forces a modifier on a well-established name of another species (S); ^{2,3}widely used for a different species (S).

^{3,1}words can be shed with minimal loss of meaning (S); ^{3,2}appropriate enough name, but an alternative equally appropriate and/or widely used is shorter (D).

^{4,2}polyphyletic group name (not listed for 'porcupine', 'flying squirrel' or 'treeshrew', as affects all names equally) (S, but in parentheses where problem minor).

^{4b}geographical name suggesting a misleading range; usually, too small a range (except *Lepus sinensis*) (M).

^{4c}implies misleading sexual status of some members of the species, and existing alternative name does not (S).

^{4d,1}less faithfully descriptive than slightly different alternative (D); ^{4d,2}not totally appropriate for species' morphology, behaviour or habitat use (M).

^{5,1}artificial English-language coinage, but widely used original name exists (D); ^{5,2}non-anglicized use of scientific name (D); ^{5,3}unnecessarily obscure to English-speakers (D).

⁸tautologous (S).

⁹indicates relatedness to taxonomic group less clearly than does an extant alternative (M).

^{10,1}widely used for a taxon part of the present species (M); ^{10,2}widely used for a taxon broader than the present species (M).

¹¹use of 'Common' (M).

Several rare disadvantages were not discussed under the principles:

^{X,1}name is plural (S); ^{X,2}name perpetrates a spelling error (S); ^{X,3}name is awkward and minor modification makes it less so (D, only for little-used names); ^{X,4}name is prone to misspelling (D, only for little-used names that can be modified slightly).

Manis pentadactyla *Chinese Pangolin^{4b}
Manis javanica Sunda Pangolin^{1,3,4b} Malayan Pangolin^{4b}; Pangolin^{1,2,1}

[^]*Manis javanica* occurs north almost to China, and east across much of the Greater Sunda; 'Sunda' thus preferable to 'Malayan', although still not accurate. Range of *M. pentadactyla* centred on China, and no other name widely used. Naming according to morphological characters preferable, but apparently never done.

Tupaia belangeri *Northern Treeshrew Common Treeshrew^{1,1,2,3,10,2,11}

[^]Formerly often included in *T. glis*. Occurs significantly farther north than any other treeshrew. 'Treeshrew' (cf. 'tree-shrew', 'tree shrew'), used at least since Lyon (1913), distances the Scandentia from Insectivora ('shrews'). 'Tupaia' would sever the misleading connection, but in Malay, 'tupai' means both squirrel and treeshrew (Harrison, 1953).

<i>Dendrogale murina</i>	Mainland Slender-tailed Treeshrew ^{1,2}	Northern Smooth-tailed Treeshrew ^{4,1}
^'Slender' more accurate than 'Smooth'; tail is hairy, even though not in form of a spreading 'brush'. 'Northern' somewhat unsatisfactory for a tropical species. A little-discussed species (Timmins <i>et al.</i> , 2003), hence few will notice these minor changes. Group name 'treeshrew' not ideal, but retaining for all Scandentia at least indicates relationships.		
<i>Cynocephalus variegatus</i>	Sunda Colugo ^{1,4,4b}	Colugo ^{2,1} ; Malayan Flying-lemur ^{4a,4b} ; Cobego ^{1,3}
^Unrelated to lemurs. Cannot fly, merely glides. 'Colugo' widely used, although origin obscure. 'Malayan' too restrictive: range extends north through Laos and Vietnam (see Ruggeri & Ettersson, 1998), east through Indonesia. Difficult to find a better modifier. 'Mainland' misleading: widespread on islands. 'Northern' and 'Southern' inappropriate: occurs both sides of <i>C. volans</i> (only other colugo), which is also 'Asian'. No morphological discriminants easy to incorporate into an English name (Corbet & Hill, 1992, Table 35). 'Sunda' not entirely accurate, but seems best of poor alternatives.		
<i>Nycticebus coucang</i>	*Slow Loris ^{2,17}	
<i>Nycticebus pygmaeus</i>	Pygmy Loris ⁹	Lesser Slow Loris ^{4d,2,1,1,2,2} ; Pygmy Slow Loris ^{4d,1,4d,2,2,2}
<i>Nycticebus intermedius</i>	Intermediate Loris ^{1,3,9}	Intermediate Slow Loris ^{2,2,3,1 or 4d,2,4d,1}
^'Lesser Slow' and 'Pygmy Slow' inappropriate for <i>N. pygmaeus</i> : it moves fast (Duckworth, 1994). If 'slow' used in either <i>N. pygmaeus</i> or <i>N. intermedius</i> , then 'Slow Loris' (for <i>N. coucang</i>) needs a modifier. 'Pygmy' more informative than 'Lesser'. Effort on English names for <i>Nycticebus</i> spp. unwise, pending clarification of taxonomy and identification characters (see Alterman & Freed, 1997; Groves, 1998).		
<i>Macaca nemestrina</i>	*Pig-tailed Macaque	Pigtail Macaque ^{1,2}
<i>Macaca assamensis</i>	*Assamese Macaque ^b	Assam Macaque ^{1,2,4b} (see 'Principles' section)
<i>Macaca mulatta</i>	*Rhesus Macaque	Rhesus Monkey ^{1,1,9}
<i>Macaca fascicularis</i>	*Long-tailed Macaque	*Crab-eating Macaque ^{4d,2}
^Longest-tailed macaque in its range, and primarily frugivorous (e.g. Yeager, 1996).		
<i>Macaca arctoides</i>	*Bear Macaque ^{1,3}	*Stump-tailed Macaque ^{2,1} ; Stumptail Macaque ^{1,2,2,1}
^'Stump-tailed Macaque' in wider use than 'Bear Macaque' but lengthier; both characterize the animal well. Former needs a modifier because extralimital <i>M. thibetana</i> widely called 'Père David's Stump-tailed Macaque' or 'Tibetan Stump-tailed Macaque'. Shortening name for <i>M. thibetana</i> desirable but beyond scope of this exercise.		
<i>Semnopithecus francoisi</i>	*François's Leaf Monkey ^{10,1}	*François's Langur ^{9,10,1} ; François's Monkey ^{1,1,9,10,1} ; Francoisi Langur ^{1,1,5,2,9}
^Various subspecies <i>sensu</i> Corbet & Hill (1992) given species status by, for example, Brandon-Jones (1995, 1996), Rowe (1996), but some English names given for them are very long. Appropriate names for each: <i>francoisi</i> , 'François's Leaf Monkey'; <i>poliocephalus</i> , 'Cat Ba Leaf Monkey' (endemic to Cat Ba island); <i>leucocephalus</i> , 'White-headed Leaf Monkey'; <i>hatinhensis</i> , 'Annamese Leaf Monkey' (not known in Ha Tinh province); <i>ebenus</i> , 'Black Leaf Monkey'; <i>laotum</i> , 'Lao Leaf Monkey' (endemic to Laos); and <i>delacouri</i> , 'Delacour's Leaf Monkey'. Nadler & Ha (2000) discussed potential of English names to promote recognition of very small range of <i>poliocephalus</i> , and highlight need for site-focused conservation attention.		
<i>Semnopithecus cristatus</i>	*Silvered Leaf Monkey	*Silvered Langur ⁹
<i>Semnopithecus phayrei</i>	*Phayre's Leaf Monkey	*Phayre's Langur ⁹ ; Phayrei Langur ^{1,1,5,2,9}
^D. Brandon-Jones (<i>in litt.</i> , 2000) restricts the Hindi/Rajasthani 'langur' to its original, <i>Semnopithecus</i> (s.s.), using 'leaf monkey' for (sub) genus <i>Trachypithecus</i> , and 'sureli' for (extralimital) <i>Presbytis</i> (s.s.). Some sources use both 'langur' and 'leaf monkey' among these monkeys, with no obvious rationale for which species has which group name.		
<i>Pygathrix nemaeus</i>	Douc ⁹	*Douc Langur ^{4a,1} ; Douc Monkey ^{1,1}
^'Douc' most probably derived from Vietnamese for colobine, 'vooc' (D. Brandon-Jones <i>in litt.</i> , 2000), with <i>P. nemaeus</i> being 'Vooc Va' (Dang, 1994). Thus, simple 'Douc' appropriate (e.g. Jablonski, 1998). However, less important to shed the English group name than with <i>Cervus nippon</i> / <i>C. unicolor</i> : the current English 'douc' not the original Vietnamese. 'Douc Langur' much more widely used than 'Douc Monkey'; but if langur used only for <i>Semnopithecus</i> spp. and <i>P. nemaeus</i> , then latter made (misleadingly) to look closer to <i>Semnopithecus</i> than to <i>Pygathrix</i> (<i>Rhinopithecus</i>) and <i>Nasalis</i> . <i>Nasalis concolor</i> widely known as 'Pig-tailed Langur'. Chinese and Vietnamese <i>Pygathrix</i> (<i>Rhinopithecus</i>) frequently called snub-nosed langurs: but <i>N. larvatus</i> rarely/never 'Proboscis Langur'. Between using 'langur' to group all Asian colobines, or only for a narrower subset (and ceasing use for <i>P. nemaeus</i>), latter seems preferable; current (haphazard) application to various odd-nosed colobines worst option of all.		
<i>Pygathrix avunculus</i>	*Tonkin Snub-nosed Monkey	*Tonkin Snub-nosed Langur ^{4a}
<i>Hylobates lar</i>	*White-handed Gibbon	Common Gibbon ^{1,1,11} ; *Lar Gibbon ^{3,2}
<i>Hylobates pileatus</i>	*Pileated Gibbon	
<i>Hylobates concolor</i>	Black-cheeked Crested Gibbon ^{1,3}	Black Gibbon ^{9,10,2} ; Crested Gibbon ^{2,1,1,10,2} ; Concolor Gibbon ^{2,1,3,2,9,10,2} ; Black-crested Gibbon ⁹
<i>Hylobates leucogenys</i>	White-cheeked Crested Gibbon ^{1,3}	White-cheeked Gibbon ⁹ ; White-check Gibbon ^{1,2,9}

Hylobates gabriellae Yellow-cheeked Crested Gibbon^{1,3} Yellow-cheeked Gibbon³; Buff-cheeked Gibbon³; Golden-cheeked Gibbon³; Red-cheeked Gibbon^{4d,2,3}

^Designating each of the three *Hylobates* (*Nomascus*) as 'X-cheeked Crested Gibbon' emphasizes not only *concolor* has crest, reflects close relationship, and highlights pelage feature for telling them apart. Acceptance of species rank for all three (from enlarged '*H. concolor*') recent, giving latitude for choice in English names. Probably more than three species in group (Geissmann, 1997; Zhang Y.P. 1997), but awaiting perfect species-level taxonomy before proposing English names continues the current confusing situation.

[*Canis lupus*] Grey Wolf Wolf^{2,1}; Timber Wolf^{1,4d,2}
Canis aureus *Golden Jackal *Asian Jackal^{4b}; Jackal^{1,1,2,1} (see principle 2)
 [*Canis familiaris*] *Domestic Dog
Vulpes vulpes *Red Fox Fox^{1,1,2,1}
Nyctereutes procyonoides *Raccoon Dog
Cuon alpinus *Dhole⁹ *Asian Wild Dog^{4a,5,1}; Red Dog^{1,1,3,2,5,1}

^Hindi 'Dhole' short, widely used, euphonious; 'Asian Wild Dog' lengthier, and can suggest (misleadingly) sister relationship with *Lycyon pictus*, the 'African Wild Dog'. Worse, *C. alpinus* not wild dog ancestral to Domestic Dog (compare with Eurasian Wild Pig/Domestic Pig, Wild Water Buffalo/Domestic Water Buffalo).
Ursus thibetanus *Asian Black Bear^{4a,7} *Himalayan Black Bear^{1,1,4,7,9,4b}

^Most tropical Asian bears are black, so 'Asian Black Bear' not particularly helpful, but no other name used as widely.

Ursus malayanus *Sun Bear *Malayan Sun Bear^{1,3,1,3b}

^The only 'sun bear' so modifier superfluous; moreover not confined to Malaya.

[*Ailurus fulgens*] *Red Panda^{4a,7} *Lesser Panda^{1,1,4a,7}; Cat-bear^{1,1,4a}

^Neither cat nor bear, nor looking particularly like a bear. If *Ailurus* (original English-language 'panda') and *Ailuropoda*, the 'Giant Panda' (and most laypeople's definitive 'panda') not closely related (see O'Brien *et al.*, 1985; Wozencraft, 1993; Glatson, 1994; and references therein), removal of English-language group name link desirable.

Mustela nivalis *Least Weasel *Weasel^{1,1,2,1}

Mustela kathiah *Yellow-bellied Weasel

Mustela sibirica *Siberian Weasel^{4b,5,17} Himalayan Weasel^{1,1,4b,5,17}; Kolinsky^{1,1,9}

^'Kolinsky' distinctive, but rarely/never used in English; maybe German (Ognev, 1931: 716), though sounds Slavic and species absent from Germany. Neither 'Siberian' (widely used) nor 'Himalayan' encompasses species' range fairly. More appropriate neologism difficult: occupies many habitats, wide geographical range, very variable in morphology.

Mustela strigijadorsa Stripe-backed Weasel^{1,2,1,4} *Back-striped Weasel^{1,3,3,4}; Striped-backed Weasel^{1,2}

^'Back-striped Weasel' prone to the spelling error 'Black-striped Weasel' (Evans, Bleisch & Timmins, 1994; Wilson & Cole, 2000); minor change little disruptive for such a little-discussed species.

Martes flavigula *Yellow-throated Marten

[*Meles meles*] *Eurasian Badger *Badger^{1,1,2,1}

Arctonyx collaris *Hog Badger Hog-nosed Badger^{1,1,3,2}

Melogale personata *Large-toothed Ferret Badger *Burmese Ferret Badger^{4b}

Melogale moschata *Small-toothed Ferret Badger *Chinese Ferret Badger^{4b}

^Both *Melogale* species widespread outside Burma/China, respectively; not the only ferret badgers within Burma/China, respectively. 'Large-toothed' and 'Small-toothed' celebrate the chief distinguishing feature.

Lutra lutra Eurasian Otter Common Otter^{1,1,11}; European Otter^{4b}; Otter^{1,1,2,1}

Lutra sumatrana *Hairy-nosed Otter

Lutrogale perspicillata *Smooth-coated Otter *Smooth Otter; Smooth Indian Otter^{1,1,3,1,3b}

^'Smooth Otter' shorter, but 'Smooth-coated Otter' completely unambiguous, and seems more widely used.

Aonyx cinerea Oriental Small-clawed Otter Small-clawed Otter^{2,1}; Clawless Otter^{1,1,2,1,4d,2}; Short-clawed Otter^{1,1,4d,1}; Asian Small-clawed Otter^{1,1}

Viverra zibetha *Large Indian Civet^{4a,4b} (see principle 9)

Viverra zibetha Taynguyen Civet

^Newly described (Sokolov, Rozhnov & Pham, 1997), now claimed to be widespread in Vietnam (Rozhnov & Pham, 1999) but validity of taxon doubted (Walston & Veron, 2001). Habitat, ecology, morphological variation poorly understood; in interim 'Taynguyen' (indicating type locality) best modifier. 'Taynguyen' the correct Vietnamese spelling (minus accents), not 'Tainguen'.

Viverra megaspila *Large-spotted Civet

Viverricula indica *Small Indian Civet^{4a,4b} Indian Palm Civet^{1,1,4a,4b}; Rasse^{1,3,9} (see principle 9)

^'Rasse' seems now rarely/never used in English, though 'Rase' in wide use in Indonesian.

Prionodon pardicolor *Spotted Linsang

Paradoxurus hermaphroditus *Common Palm Civet¹¹ Toddy-cat^{1,1,4a}; Asian Palm Civet^{1,3}

^Use of 'Common' is not generally encouraged, but Wilson & Cole's (2000) neologism 'Asian Palm Civet' disruptive (outside India, universally 'Common Palm Civet'), and not distinguishing (all species of *Paradoxurinae* inhabit Asia).

<i>Paguma larvata</i>	*Masked Palm Civet	Himalayan Palm Civet ¹¹⁻⁹
<i>Arctictis binturong</i>	*Binturong ⁹	Bearcat ^{1,4,5,1} (see principle 9)
<i>Arctogalidia trivirgata</i>	*Small-toothed Palm Civet	*Three-striped Palm Civet
^Some individuals' stripes very faint, but all have the distinctive teeth.		
<i>Hemigalus owstoni</i>	Owston's Civet ¹³	*Owston's Palm Civet ^{4*} ; Owston's Banded Civet ^{1,3,17,3,2} (see 'Principles' section)
<i>Cynogale lowei</i>	Lowe's Otter Civet	Tonkin Otter Civet ^{4b}
<i>Herpestes javanicus</i>	Small Asian Mongoose	Javan Mongoose ^{1,1,4b,10,1} ; Small Indian Mongoose ^{1,1,4b,10,1}

^As used by Corbet & Hill (1992), comprises *H. javanicus* 'Javan Mongoose' and *H. auropunctatus* 'Small Indian Mongoose'. Even for the two, the geographical range implied by each name misleadingly small. For aggregate, either name entirely unsuitable. Much the smallest Asian mongoose; Corbet & Hill's (1992) minor modification to 'Small Asian Mongoose' perfectly characterizes the expanded species.

<i>Herpestes urva</i>	*Crab-eating Mongoose
[<i>Felis catus</i>]	*Domestic Cat
<i>Felis chaus</i>	*Jungle Cat ^{4d,2}

^'Jungle Cat' inappropriate (avoids jungly areas; Prater, 1971), but uses scrub jungle, and no other name used today in Asia.

<i>Prionailurus bengalensis</i>	*Leopard Cat	
<i>Prionailurus viverrinus</i>	*Fishing Cat	
<i>Catopuma temminckii</i>	*Asian Golden Cat	*Golden Cat ¹ ; Temminck's Cat ¹¹

^Many individuals not golden, but no alternative name in wide use.

<i>Pardofelis marmorata</i>	*Marbled Cat
<i>Pardofelis nebulosa</i>	*Clouded Leopard ^{2,2,4*}

^Not closely related to *Panthera pardus*, most people's definitive 'leopard'. Moreover, use of 'Clouded Leopard' necessitates a modifier for 'Leopard' for *P. pardus*. Leopard has high public profile and huge range; difficult to stimulate an English name change (see below). Perhaps easier to do this for *P. nebulosa*, but this species also well known; and known only by 'Clouded Leopard'. Perhaps the dramatic 'Great Clouded Cat' might be acceptable.

<i>Panthera pardus</i>	*Leopard ^{2,1,9}	Panther ^{1,1, or 1,3,4a,9}
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^Most difficult species under consideration. Use of 'Clouded Leopard' and 'Snow Leopard' for *Pardofelis nebulosa* and *Panthera uncia*, respectively, makes 'leopard' a group name. Thus calling *P. pardus* merely 'Leopard' generates ambiguity. Moreover, melanics widely called 'black panthers'; popular understanding of conspecificity with 'leopard' weak. 'Panther' rarely/never used in Africa; worse, *Puma concolor* called 'Panther' in parts of North America (particularly *P. c. coryi*, e.g. IUCN, 1996). Were 'Panther' abandoned for *Puma concolor* ('Puma', 'Cougar' both widely used and unique), then perhaps useful for *P. pardus*. Modifier for 'Leopard' seems least inappropriate course currently, accepting that in few situations (especially west of India) will it actually be used. 'Spotted Leopard' sometimes used by popular writers to signify expressly *P. pardus* rather than any other leopard, for example, in *The Nation* (English-language Thai newspaper), Bowen (2000) stated '[In] Scythian art... use of spotted and snow leopards... recall[s]...' to avoid awkward phrase '... use of leopards and snow leopards...'. But 'Spotted Leopard' would cause popular confusion: in black phase, spots not obvious. 'Common Leopard' undesirable: now greatly reduced in much of range.

<i>Panthera tigris</i>	*Tiger ⁹	
<i>Orcaella brevirostris</i>	*Irrawaddy Dolphin ^{4b}	Snubfin Dolphin ¹¹
<i>Elephas maximus</i>	*Asian Elephant	*Indian Elephant ^{1,1,4b} (see principle 4b iv)
[<i>Tapirus indicus</i>]	*Asian Tapir	*Malayan Tapir ² ; Malay Tapir ^{1,2,4b}
<i>Rhinoceros sondaicus</i>	*Lesser One-horned Rhinoceros	*Javan Rhinoceros ^{4b} ; Smaller One-horned Rhinoceros ^{1,2}
<i>Dicerorhinus sumatrensis</i>	Hairy Rhinoceros ^{1,1}	*Sumatran Rhinoceros ^{4b} ; *Asian Two-horned Rhinoceros ^{1,2,3,2}

^'Hairy Rhinoceros' short, unambiguous, celebrating a characteristic diagnostic among living rhinoceroses. Not widely used recently despite long pedigree.

<i>Sus scrofa</i>	Eurasian Wild Pig	Wild Boar ^{4b} ; Common Wild Pig ^{1,1,11} ; Indian Wild Boar ^{1,1,4b,4c} (see principle 4c)
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[<i>Sus domesticus</i>]	*Domestic Pig	
<i>Sus bucculentus</i>	Heude's Pig ^{1,2}	Indochinese Warty Pig ^{1,1,4d,27} ; Vietnam Warty Pig ^{1,1,4d,27} ; Indochinese Pig ^{4d,27} ; Vietnamese Pig ^{4b}

^Not restricted to Vietnam (Groves *et al.*, 1997); 'Indochinese' ambiguous; prominence of warts unclear (species unknown in flesh; 'Warty' presumed harkover from former treatment within *S. verrucosus* 'Javan Warty Pig'). Scientific name literally 'Chubby-cheeked Pig' but no suggestion of useful morphological feature, so not proposed for English name. Named by Heude (1892), so 'Heude's' best modifier on current knowledge.