

Great Hornbill

राजधनेश



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Illustrations

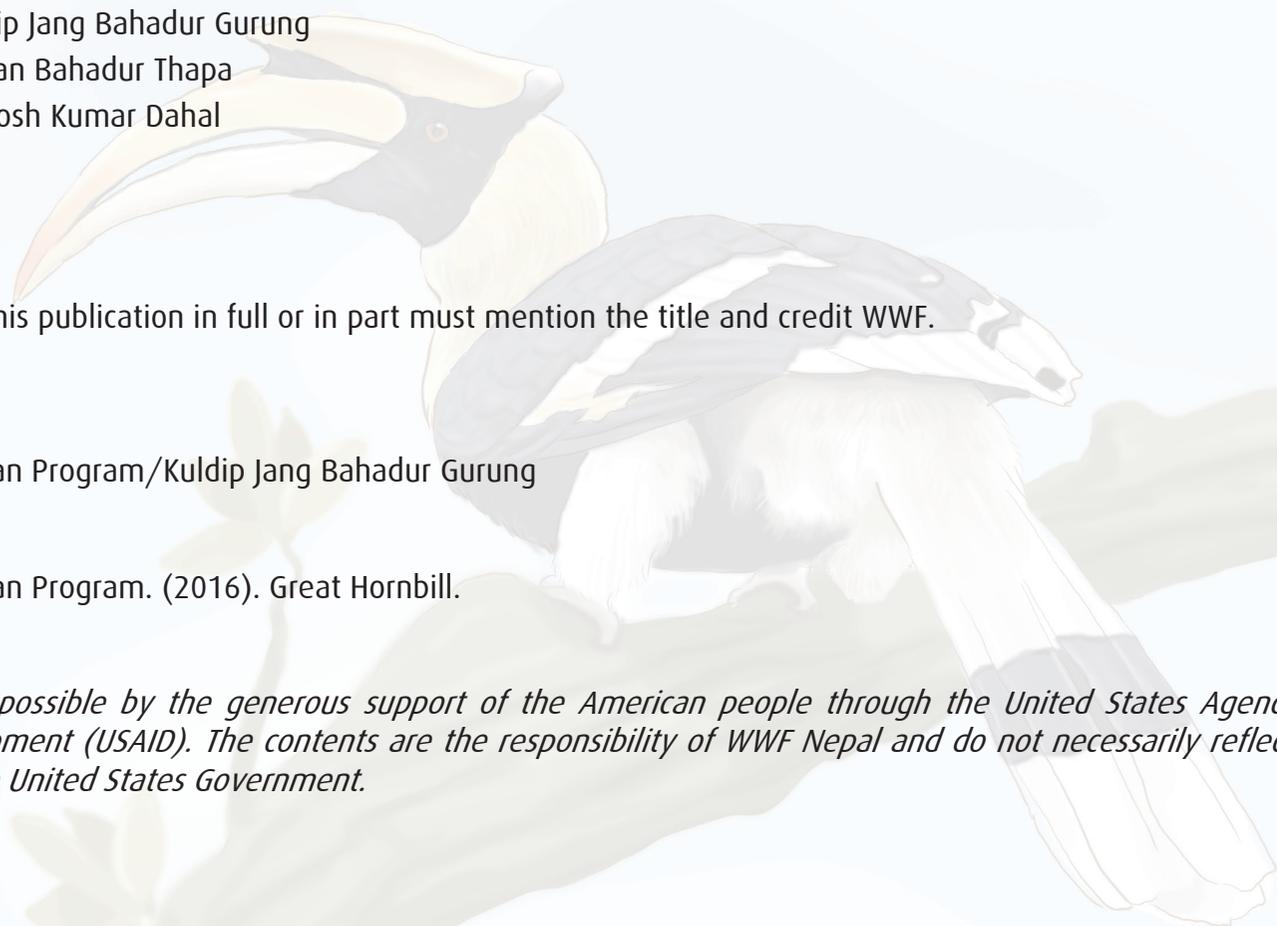
WWF Nepal, Hariyo Ban Program/Kuldip Jang Bahadur Gurung

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Morphology and Structure

Great Hornbill *Buceros bicornis* is the largest hornbill species found in the Indian subcontinent. Male is slightly larger than female and has a deep red iris with the black skin surrounding the eye while female has pearly white iris and pink circumorbital skin. The massive bill with bright yellow horn on its top, called Casque, is a unique morphological feature of Great Hornbill. It is made up of spongy tissue and is very light. Beak is curved downwards and besides eating it also helps while climbing the tree. The beak and feathers on the neck, breast, wings, and tail that appear yellow, are actually white in color and are stained by yellowish preen-gland oils.

राजधनेस भारतीय उपमहादेशमा पाइने सबैभन्दा ठूलो धनेस प्रजाति हो। धनेसको भाले र पोथीमा थोरै मात्र भिन्नता हुन्छ। भाले पोथीभन्दा केही ठूलो हुन्छ। भालेको आँखाको रङ गाढा रातो र घेरा कालो हुन्छ। पोथीको आँखाको रङ भने मोती जस्तो सेतो र घेरा गुलाबी रङको हुन्छ। विशाल टुँड माथिको पहेँलो टुँडमन्जुसा राजधनेसको विशेषता हो। यो टुँड मञ्जुसा नरम तन्तुले बनेको हुँदा हलुका हुन्छ। टुँड तलतिर बाङ्गिएको हुन्छ जसले खाना च्याप्नबाहेक रुख चढ्नको लागि पनि सहयोग गर्छ। पहेँलो देखिने टुँड, घाँटी, छाती, पंखेटा र पुच्छरको प्वाँख वास्तवमा सेतो रङका हुन्छन् जसलाई श्रृङ्गार ग्रन्थीबाट निस्कने तेल दलेर पहेँलो बनाउँछ।

Female

पोथी

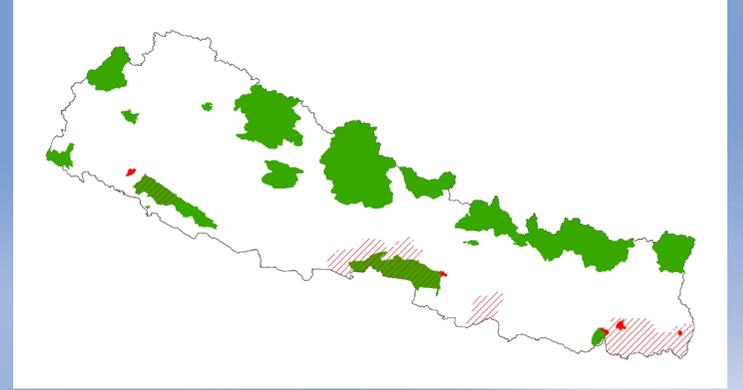
Male

भाले



Distribution and Population

Chitwan National Park is the major stronghold for Great Hornbill in Nepal. It is also found in Banke and Bardia National Park, Shuklaphanta Wildlife Reserve and surrounding areas. It has also been recorded from Jhapa, Sunsari, Makawanpur, Kapilvastu and Kailali districts and in the forests of Ghodaghodi Lake. Besides Nepal, Great Hornbill is found in India, China, Bhutan, Bangladesh, Lao PDR, VietNam, Cambodia, Thailand, Myanmar, Malaysia and Indonesian island of Sumatra. Globally, it is estimated that there are 13,000-27,000 individuals in the world and 80-150 birds in Nepal.



नेपालमा राजधनेसको प्रमुख वासस्थान चितवन राष्ट्रिय निकुञ्ज हो । यो संरक्षित क्षेत्रभित्र बाँके तथा बर्दिया राष्ट्रिय निकुञ्ज, शुक्लाफाँट वन्यजन्तु आरक्ष र आसपासका क्षेत्रहरूमा तथा संरक्षित क्षेत्र बाहिर भ्र्पापा, सुनसरी, मकवानपुर, कपिलवस्तु र कैलाली जिल्लाको जङ्गलमा पनि पाइन्छ । नेपाल बाहेक भारत, चीन, भुटान, बङ्गलादेश, लाओस, भियतनाम, क्याम्बोडिया, थाइल्याण्ड, म्यानमार, मलेसिया र इन्डोनेसियाको सुमात्रा टापुमासमेत फैलिएको छ । विश्वमा यसको संख्या १३,०००-२७,००० सम्म र नेपालमा ८०-१५० अनुमान गरिएको छ ।

Habitat

Mature broadleaved forest with fruiting tree is the major habitat of Great Hornbill. It mainly favors unlogged old-growth forest with large trees. It occurs from elevation of 100-500m asl.



वयस्क फलफुलका रुखहरू भएको चौडापाते जङ्गल राजधनेसको मुख्य वासस्थान हो । यो छाँटकाँट नगरिएको, ठूला रुख भएको पुरानो जङ्गलमा बस्न मन पराउँछ र समुन्द्री सतहबाट १००-५०० मी. सम्मको उचाईमा पाइन्छ ।

Feeding Behavior

Great Hornbill feeds on huge variety of fruits, berries and figs. It flies great distances and disperses the seeds through pellets which help to regenerate forests. It maintains a healthy ecosystem by consuming large number of pest insects and small animals like lizards, rats and shrews. Thus, it is also called the "Farmer of the Forest".



राजधनेसले विविध प्रकारका फलफुल, जामुन र अन्जिरहरू खान्छ र त्यसका विजहरूलाई टाढाटाढा उड्दा विस्टामार्फत वितरण गर्छ । ती छरिएका फलफुलका बीउहरूबाट नयाँ बोटविरुवाहरू उम्रन्छन् जसले जङ्गल जोगाइराख्न मद्दत पुग्छ । साथै बालिनाली विगाने किरा, फट्याङ्गा, छेपारो, मुसा, छुचुन्द्रा जस्ता साना जनावरहरू खाइदिएर पर्यावरणलाई स्वस्थ राख्छ । अतः राजधनेसलाई 'जङ्गलको किसान' पनि भन्ने गरिन्छ ।

Reproduction and Life Cycle

Female lays upto two eggs and incubates for 40 days inside the tree holes. After laying eggs, male seals the opening with the help of mud and droppings and female stays inside the tree hole until her chicks fledges. The female breaths and takes food brought by male through the small slit made in the nest opening during this period. Parents care for the chicks until they reach 4-5 months old. Life span ranges from 35-40 years.

पोथीले दुई ओटासम्म अण्डा पाछे र चालीस दिनसम्म ओथारो बस्छे । पोथीले अण्डा पारेपछि बच्चाहरू नहुर्कन्जेलसम्म भालेले पोथीलाई रुखको टोडकाभित्र नै थुनेर राख्छ । भालेले हिलो र विष्टाको प्रयोग गरी टोडको थुन्ने गर्छ । त्यसरी थुनेको टोडकोमा भालेले सानो प्वाल बनाउँछ र त्यसै प्वालबाट पोथीले हावा र भालेले ल्याएको आहारा लिन्छे । धनेस जोडीले आफ्ना बचेराहरूलाई ४-५ महिनासम्म हेरचाह गर्छन । यसको आयु ३५-४० वर्षसम्म हुन्छ ।



Social Behavior

The flight of the Great Hornbill can be heard from half a mile away which is a sign so that the female inside the nest knows the arrival of male. This sound seems like the puffing of a rail engine starting up. It is active during the day time.



राजधनेसले पँखेटा फट्फटाएको आवाज निकै परसम्म सुनिन्छ। यो आवाज रेल इन्जिन सुरु भएको जस्तै भान हुन्छ। यही आवाजको मद्दतले टोडकोमा थुनिएर बसेकी पोथीले भाले आएको थाहा पाउँछे। राजधनेस दिनमा सक्रिय हुन्छ।



Threats

Great Hornbill is considered important in many tribal cultures and rituals. Tribesmen of northeastern India and Borneo wear its feathers and beaks as decorative during festivals. In some parts of Nepal, casque oil was used for restoring falling hairs— which is a superstitious belief. Locally it is also called "Homrai" in Nepal and "Banrao" in India both meaning "King of the Forest". Deforestation especially large, mature fruiting trees which is essential for its feeding ground is the major cause for the loss of its habitat. People hunt it for food, medicinal purpose and trade its attractive bills and feathers which are the reasons for the rapid decline in population.

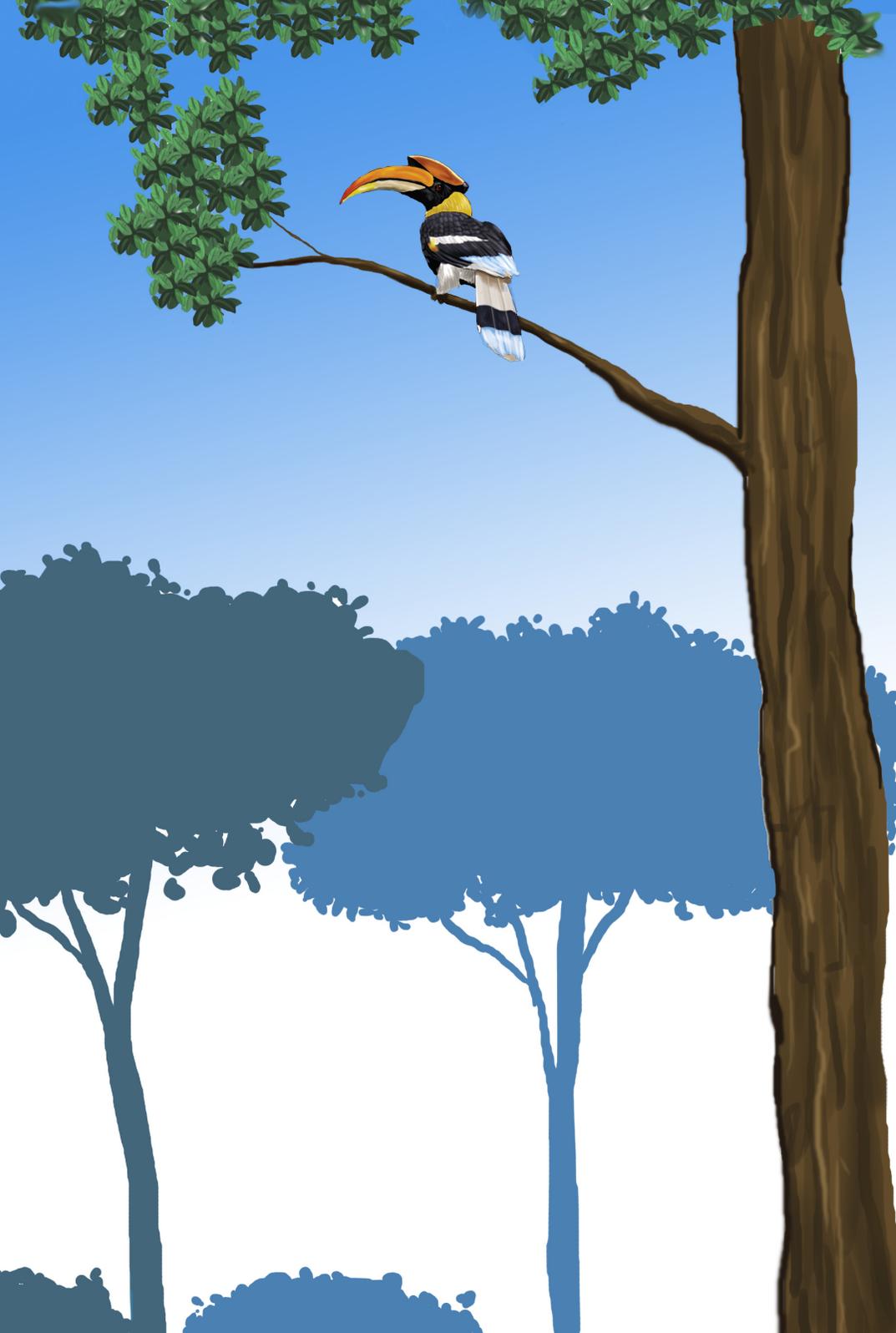
राजधनेस धेरै आदिवासी संस्कृति र संस्कारमा महत्वपूर्ण मानिन्छ। उत्तरपूर्वी भारत तथा ब्रुनाइका आदिवासीहरू चाडपर्वका बेला यसको प्वाँख र चुच्चो श्रृङ्गार सामग्रीका रूपमा प्रयोग गर्छन्। श्रृङ्गार ग्रन्थीबाट निस्केको तेललाई कतै कतै मानिसहरूले कपाल भर्न रोकने औषधिका रूपमा समेत प्रयोग गर्छन् जुन पूर्णतया अन्धविश्वास हो। स्थानीय भाषामा यसलाई नेपालमा 'होमराई' र भारतमा 'वनराओ' भनिन्छ, जसका अर्थ 'जङ्गलको राजा' भन्ने हुन्छ। राजधनेसको वासस्थान विनास हुनुको मुख्य कारण वयस्क रुखहरू भएको जङ्गल फँडानीका कारणले हो। मानिसले यसको शिकार आकर्षक ठुँड, प्वाँख र मासुका लागि गर्छ जसले गर्दा यसको सङ्ख्या तीव्र रूपमा घट्दै गएको छ।



Conservation and Legal Status

Globally, Great Hornbill is categorized as Near-Threatened and nationally Endangered species in IUCN Red List and listed in Appendix I in the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). It is also protected by National Parks and Wildlife Conservation Act, 1973 A.D. (2029 B.S.) of Nepal and poaching or killing of Great Hornbill is punishable crime with penalty of NPR 15,000-30,000 or 3-9 months of imprisonment or both.

विश्वव्यापी रूपमा आइ.यु.सि.एन. को रातो सूचीमा राजधनेसलाई सङ्कटग्रस्त र राष्ट्रिय सूचीमा संकटापन्न अवस्थामा राखिएको छ । साइटिस महासन्धिले यसलाई अनुसूची १ मा राखेको छ । यो नेपालको राष्ट्रिय निकुञ्ज तथा वन्यजन्तु संरक्षण ऐन, वि.सं. २०२९ द्वारा संरक्षित पन्छी हो र यसलाई शिकार गरी मारेमा वा घाइते बनाएमा १५,०००-३०,००० रूपैयासम्म जरिवाना वा ३-९ महिनासम्म कैद वा दुवै सजाय हुने प्रावधान छ ।



Key Facts मुख्य विशेषता	
Common Name नाम	Great Hornbill राजधनेस
Scientific Name वैज्ञानिक नाम	<i>Buceros bicornis</i>
Height उचाई	95-105 cm ९५-१०५ से.मि.
Weight तौल	2.15-4 kg. २.१५-४ कि.ग्रा.
Unique Feature विशेषता	Massive bill with brightly yellow horn on its top, called Casque विशाल ठुँड माथिको पहेँलो ठुँडमन्जुसा
Global Status अवस्था (विश्व)	Near-threatened निकट सङ्कटग्रस्त
National Status अवस्था (राष्ट्रिय)	Endangered सङ्कटापन्न
Global Population सङ्ख्या (विश्व)	13,000-27,000 १३,०००-२७,०००
National Population सङ्ख्या (राष्ट्रिय)	80-150 ८०-१५०
Global Distribution फैलावट (विश्व)	Nepal, India, China, Bhutan, Bangladesh, Lao PDR, VietNam, Cambodia, Thailand, Myanmar, Malaysia and Indonesian island of Sumatra नेपाल, भारत, चीन, भुटान, बङ्गलादेश, लाओस, भियतनाम, क्याम्बोडिया, थाइल्याण्ड, म्यानमार, मलेसिया र इन्डोनेसियाको सुमात्रा टापु
National Distribution फैलावट (राष्ट्रिय)	Chitawan National Park, Banke National Park, Bardia National Park, Shuklaphant Wildlife Reserve and surrounding areas. Also from Jhapa, Sunsari, Makawanpur, Kapilvastu and Kailali districts and in the forest of Ghodaghodi lake. चितवन, बाँके तथा बर्दिया राष्ट्रिय निकुञ्ज, शुक्लाफाँट वन्यजन्तु आरक्ष र आसपासका क्षेत्रहरूमा तथा संरक्षित क्षेत्र बाहिर नेपालको झापा, सुनसरी, मकवानपुर, कपिलवस्तु र कैलाली जिल्लाको घोडाघोडी तालको वन क्षेत्र ।
Threats खतरा	Deforestation especially large, mature fruiting trees are the major cause for the loss of its habitat. Hunting for food, medicinal purpose and trading for attractive bills and feathers. वयस्क रुखहरू भएको जङ्गल फाँडानीका कारणल वासस्थानको विनास, आकर्षक ठुँड, प्वाँख र मासुका लागि शिकार ।

The Hariyo Ban Program is named after the famous Nepali saying 'Hariyo Ban Nepal ko Dhan' (Healthy green forests are the wealth of Nepal). It is a USAID funded initiative that aims to reduce the adverse impacts of climate change and threats to biodiversity in Nepal. This will be accomplished by working with the government, communities, civil society and private sector. In particular, the Hariyo Ban Program works to empower Nepal's local communities in safeguarding the country's living heritage and adapting to climate change through sound conservation and livelihood approaches. Thus the Program emphasizes the links between people and forests and is designed to benefit nature and people in Nepal. At the heart of Hariyo Ban lie three interwoven components – biodiversity conservation, payments for ecosystem services including REDD+ and climate change adaptation. These are supported by livelihoods, governance, and gender and social inclusion as cross-cutting themes. A consortium of four non-governmental organizations is implementing the Hariyo Ban Program with WWF Nepal leading the consortium alongside CARE Nepal, FECOFUN and NTNC.



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