Loriculus galgulus - Blue-crowned Hanging Parrot

Blue-crowned Hanging-parrot

_Loriculus galgulus_ (Linnaeus, 1758)

Vernacular names: Blue-crowned hanging-parrot, Blue-topped hanging-parrot, Malaysian hanging-parrot, Malay lorikeet, _Serindit_ (Malay), _Serindji_ (Chinese)

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**Distribution**

This parrot can be found on the Thai-Malay Peninsula, Singapore, Sumatra and her surrounding islands, as well as Borneo and her surrounding islands. It has also been recorded in West Java, near Jakarta. On the Thai-Malay Peninsula, it is commonly found only up to about 7°N of the equator. North of this, it is only rarely recorded, perhaps only as a non-breeding dispersant.

![Geographical distribution of the blue-crowned hanging-parrot. Map from IUCN.](map.jpg)

**Description**

Adult
The blue-crowned hanging-parrot is a short-tailed parrot that grows to just between 12 and 14cm, making it Singapore's smallest parrot[4].

**Male:** Mostly green with turquoise blue underwing and lower tail surface, a dark blue crown patch, golden-yellow "saddle" on its mantle (upper back), golden-yellow back band, red patch on throat/ upper chest, and red upper tail coverts. The eyes are dark and the bill is black.

**Female:** Like the male, but without the red throat and golden-yellow band on back. Also, minimal blue on crown and golden on mantle.[5][6][7][8]

<table>
<thead>
<tr>
<th>Feature</th>
<th>Male</th>
<th>Female</th>
<th>Juvenile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crown of head</td>
<td>Blue crown patch</td>
<td>Minimal blue on crown</td>
<td>Minimal blue on crown</td>
</tr>
<tr>
<td>Throat/upper chest</td>
<td>Red throat patch</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Mantle (upper back)</td>
<td>Golden-yellow patch</td>
<td>Minimal yellow on mantle</td>
<td>Green</td>
</tr>
<tr>
<td>Lower back</td>
<td>Golden-yellow band</td>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Upper tail coverts</td>
<td>Red</td>
<td>Red</td>
<td>Green feather margined in red</td>
</tr>
<tr>
<td>Bill</td>
<td>Black</td>
<td>Black</td>
<td>Brown/horn-coloured</td>
</tr>
</tbody>
</table>

**Juvenile**

Juvenile birds look like adult females, but with wholly green mantle, and green rump with feathers margined with red. Their bills are coloured yellow or brown. [9]
Diagnosis from similar species

The blue-crowned hanging-parrot shares part of its range with some other closely related hanging-parrots, which look superficially similar. In the northern part of the Thai-Malay Peninsula it is sympatric with the vernal hanging parrot *Loriculus vernalis*; males can easily be differentiated via the blue crown patch and red throat patch, which are present in the blue-crowned hanging-parrot but not in the vernal hanging-parrot. Additionally, the two species can be told apart by bill colour: black in the blue-crowned hanging-parrot, and orange-red in the vernal hanging-parrot. This can be used to differentiate between females of the two species. [10]

On the western end of the island of Java, the blue-crowned hanging-parrot is sympatric with the yellow-throated hanging-parrot *Loriculus pusillus*. Once again, the male blue-crowned hanging-parrot can be clearly diagnosed by the blue crown patch and red throat patch; as its name suggests, the yellow-throated hanging-parrot has a yellow throat patch. Females can easily be told apart by bill colour, which is orange in the yellow-throated hanging-parrot. [11][12]

<table>
<thead>
<tr>
<th>Feature</th>
<th>Vernal hanging-parrot</th>
<th>Blue-crowned hanging-parrot</th>
<th>Yellow-throated hanging-parrot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crown patch</td>
<td>Absent</td>
<td>Blue (male), absent (female)</td>
<td>Absent</td>
</tr>
<tr>
<td>Throat patch</td>
<td>Absent</td>
<td>Red throat patch (male), absent (female)</td>
<td>Yellow throat patch (male), absent (female)</td>
</tr>
<tr>
<td>Bill colour</td>
<td>Orange-red</td>
<td>Black</td>
<td>Orange</td>
</tr>
</tbody>
</table>

Vernal hanging-parrot, blue-crowned hanging-parrot, and yellow-throated hanging-parrot males side-by-side, with the diagnostic features circled in red. Images adapted from Viwake (Wikimedia Commons), Robert from PBase, and Yongki Winardi.

Ecology and Behaviour

Male bird in the Singapore Botanic Gardens, feeding on palm fruit. © Con Foley.

Habitat
The blue-crowned hanging-parrot is not particularly picky when it comes to habitat. It can be found in secondary and primary forests, forest edge, old plantations, mangroves, parkland, orchards, coconut groves, and urban areas, including trees in the heart of Orchard Road. It has been reported to be more common in selectively logged forest than primary forest. It generally ranges up to about 1300m above sea level, but has been recorded as high up as 2,000m above sea level at the summit of Tahan, Taman Negara. In Singapore, it can be seen almost anywhere; the Botanic Gardens and other green spaces are particularly good spots for seeing these little parrots, especially if there are flowering or fruiting trees near by.

All of these varied habitats are used by the blue-crowned hanging-parrot. First 4 images © Shengrong Ng, last image © Calvin Teo (Wikimedia Commons)

**Feeding habits**

In the wild, this parrot eats nectar, flowers, fruits, buds, nuts and seeds. It often feeds on fruit in orchards, and is frequently seen feeding on the mesocarp of oil palm fruits in plantations. In the wild, it has been observed feeding on the fruits of several fig species (eg. *Ficus caulocarpa*, *F. virens*, *F. crassoramea*, *F. stupenda*), and is also attracted to flowers (eg. coral flowers, *Erythrina* sp.).

**Lifespan**

The maximum recorded longevity for this species in captivity is 14.3 years.

**Behaviour and social interactions**

The blue-crowned hanging-parrot ranges very widely, even moving between different islands. It may be truly nomadic, or it may trapline around a common range. They move about mainly in the canopy and middle storey, and are usually observed singly or in pairs during the breeding season, or in groups numbering up to 150 birds during the non-breeding season.

These parrots employ a range of aggressive actions when spacing themselves at food sources. These include lunging at opponents' feet, gaping, as well as various wing movements such as displaying the inner wing colours by holding out the carpus of the folded wing, or stretching the entire wing out or up. Males courtship-feed females with regurgitated food; the most distinctive courtship display comprises of a run with the body held stiffly upright and red plumage-parts ruffled.

Like other parrots in the genus *Loriculus*, blue-crowned hanging parrots roost upside-down, hanging from both feet. In order to defecate in this position, the parrot transfers to one foot, flexes its body to 45°, and raises its tail.

**Reproduction**

The blue-crowned hanging-parrot breeds in disturbed forests, in tree holes and cavities up to 12m above the ground in both live and dead trees. The breeding period runs from about January to August. Hanging parrots are one of the few parrot species known to build rather than merely excavate: they are purported to carry nesting material by tucking it into their plumage. The clutch size usually numbers about three to four. The near-spherical eggs are white and glossless, and are incubated for 20 days. Chicks leave the nest about 33 days after hatching.

**Voice**

When in flight, this species often utters a shrill, high-pitched, metallic ringing call, usually approximated as *tsi* or *tsri*, sometimes uttered repeatedly as *tsi-tsi-tsi...* when the bird is in groups. When it is feeding, it often utters a shrill *frir*, and also bisyllabic call *tir-rit* or *squeak-rit* which may have an alarm function. Its Malay name *serin-dit* is onomatopoeic in nature, and is an approximation of its call. Its threat actions are accompanied by a throaty, grating sound.

Recording and sonogram of flight call, © Frank Lambert. Portion of sonogram correspond to the hanging-parrot's calls is marked out in red.
Conservation

International Union for Conservation of Nature (IUCN) rating: Least Concern
Convention on International Trade in Endangered Species (CITES): Appendix II

The blue-crowned hanging-parrot is categorized as “Least Concern” by the IUCN, meaning populations are not in imminent danger of extinction in the near future. The world population thought to exceed 100,000, with populations thought to be stable. It is very common and widespread over much of its range. In Singapore, this species used to be rare, but has made a dramatic comeback and is now a common parkland bird, probably due to the widespread planting of fruit trees across the island. However, in Singapore it is still officially listed as “nationally endangered”.

Threats

The species has been heavily traded: between 2012 and 1981, when it was listed on CITES Appendix II, more than 100,000 wild-caught individuals have been recorded in international trade. Between 1985 to 1990, 38,381 birds were exported from Malaysia alone. In parts of its range, wild populations are scarce in forests accessible to trappers due to it being commonly caught for the pet trade. Trappers often take advantage of the birds’ highly social habits to do this: captive birds are used to call wild birds down, which then get stuck in latex prepared by the trapper, or trapped in specially prepared cages.

The worldwide trade in birds captured from the wild, usually for the pet trade, is a large and cruel one. Between two to five million wild birds belonging to more than 2,600 species (comprising about a quarter of all known bird species) are traded yearly in the 1990s, with the Passerines (perching birds) and the Psittacines (parrots) particularly badly affected. 26.8% of the world's parrot species (95 out of 354 species) are threatened with extinction, largely due to the twin impacts of collection for the pet trade and habitat destruction. While the wild blue-crowned hanging-parrot populations do not seem to be too badly affected at the moment, they may not be able to withstand both these continuing impacts. Additionally, the process of capture, transport and sale is often fraught with pain, suffering and death for the birds: for every wild bird alive at a pet shop, many more birds have perished in transit. Many bird species in the region are suffering from unsustainable collection pressures: one example is the straw-headed bulbul *Pycnonotus zeylanicus*, which has been so extensively trapped for its song that it has been extirpated from most of its range and is in danger of outright extinction.

The wild bird trade is a cruel and unsustainable one, and we should not allow it to put any more species, including the blue-crowned hanging-parrot, in peril.
Captive parrots are used to attract wild birds. Sociability is not always a good thing, sadly. © Nazeri Abghani.

A newly captured male in a net, awaiting processing. © Nazeri Abghani.

Video of a captured blue-crowned hanging-parrot caught with latex, being processed (warning: some may find this video upsetting)

Video of a trapper retrieving a wild-caught blue-crowned hanging-parrot from a cage trap:

Etymology, taxonomy and phylogenetics

Etymology

The genus name *Loriculus* comes from the Latin word "lorica", meaning "armour" or "breastplate", with the suffix "-ulus", which means "little". The species name *galgulus* is a Latin word meaning "small bird". *Loriculus galgulus* thus can be roughly translated into "small bird with the little breastplate", probably referring to the red throat patch found in the males.

Taxonomy

* Important note: As higher ranks in classification are arbitrary human constructs[^44][^45], I have elected not to list them, and instead list only taxon names.

Animalia
Chordata
Aves
Psittaciformes
Psittacoidea
Psittaculidae
Agapornithinae
*Loriculus* Blyth, 1850
*L. galgulus* (Linnaeus 1758)

[^44]: [^45]:

Small bird with the little breastplate? Sounds about right. © Stavenn (Wikimedia Commons)
The blue-crowned hanging-parrot was first described under the name *Psittacus galgulus* in the 10th edition of Linnaeus's book *Systema Naturae*, in 1758. The type locality was mistakenly listed as "India", instead of Malacca. *Systema Naturae* marks the starting point of binomial zoological nomenclature; before then, the majority of zoological catalogues used polynomial names when describing the taxa included in *Systema Naturae*. Th e polynomial name on which Linnaeus based his description of the blue-crowned hanging parrot, for example, was *Psittacus minimus viridis ruber indicus* (quite a mouthful!), of Edwards 1743-51. All the 34 parrots described by Linnaeus in *Systema Naturae* were lumped under the same genus name, *Psittacus*. Beyond this point, the taxonomic history of the blue-crowned hanging parrot gets a little more confusing: while most taxonomic and biodiversity information sources state the species as having no synonyms, the World Bird Database lists multiple subsequent descriptions of the species under a range of different synonyms. Examples include *Psittacus pumilus* Scopoli 1786 and *Psittacula cyanoplea* Bourjot Saint-Hilaire 1838. These subsequent descriptions notwithstanding, the name *Psittacula galgulus* remained valid due to the Principle of Priority in taxonomy all the way to 1850, which was when Blyth described the genus *Loriculus* and designated this species as the type species. The blue-crowned hanging-parrot was thus renamed *Loriculus galgulus* in 1850, which is its valid scientific name to date.

In 1912, Oberholser proposed splitting *Loriculus galgulus* into 2 separate subspecies *Loriculus galgulus galgulus* and *Loriculus galgulus dolichopterus*; however, scientific consensus is that the species is monotypic with no distinct subspecies.

**Type Information**

Unfortunately, photographs and information on the holotype of this species cannot be found online. However, do note that this distinction is generally thought to be invalid.

**Name:** *Loriculus galgulus galgulus* Oberholser 1912  
**Sex:** Male  
**Location:** National Museum of Natural History, Smithsonian Institution, Washington D.C.  
**Preparation:** Skin (whole)  
**Collection location:** Nias Island, Mojeia River, Sumatra  
**Collection date:** 14 Mar 1905

**Name:** *Loriculus galgulus dolichopterus* Oberholser 1912  
**Sex:** Female  
**Location:** National Museum of Natural History, Smithsonian Institution, Washington D.C.  
**Preparation:** Skin (whole)  
**Collection location:** Enggano Island, Sumatra  
**Collection date:** 06 Nov 1904

**Phylogeny**

The parrots (Psittaciformes) diverged from the perching birds (Passeriformes) about 74.8 million years ago. Their placement within the avian tree of life is shown in the image below from Birdtree.org. A circular tree is being used here instead of a more conventional tree, as a circular tree is better able to accommodate the large number of branches required to illustrate the entire avian tree.
The exact position of the Psittaciformes clade within the land birds is marked out in red in the image below. The Psittaciformes are sister group to the Passeriformes, or perching birds.

There has been a resurgence in research on phylogenetic relationships within the Psittaciformes clade in the past 2 decades [57], and scientific understanding of the evolutionary relationships of many groups within the Psittaciformes, including the hanging-parrots, has changed several times in recent years. In 2012, Joseph et al. published a revised nomenclature and classification for parrot clades based on the most updated scientific understanding of phylogenetic relationships. He grouped the three genera Loriculus, Agapornis and Bolbopsittacus together into the same clade, which he called the Agapornithinae. Wright et al. in 2008 was the first to propose this relationship: using multilocus molecular analysis of 5 genes (2 mitochondrial and 3 nuclear), they showed hanging-parrots to be monophyletic with the lovebirds (genus Agapornis, from Africa) and the Guaiabero (monotypic genus Bolbopsittacus, from the Philippines). [58] This relationship was later confirmed by several other studies. [59][60][61]
Representatives of each of the three genera that make up the Agapornithinae: *Agapornis roseicollis*, *Loriculus galgulus*, and *Bolbopsittacus lunulatus*.

*Loriculus* image © Robert from PBase. *Agapornis* and *Bolbopsittacus* images © Juan Emilio and Luis Limchiu respectively (Wikimedia Commons).

**Additional resources**
Avibase: general information on the blue-crowned hanging-parrot.

BirdLife International: BirdLife is the IUCN Red List authority for birds. This site contains information on and justification of the conservation status of birds all over the world, including the blue-crowned hanging-parrot.

Birdtree.org: this website accompanies the study on global bird diversity by Jetz et al. 2012 [82], and contains a lot of information on the phylogenetic relationships and divergence times between bird clades.

Tree of Life Web Project: the Tree of Life Web Project provides a wealth of information about the characteristics and phylogeny of the world's biodiversity.

World Parrot Trust: general information on the blue-crowned hanging-parrot.

Encyclopedia of Life: general information on the blue-crowned hanging-parrot.

National Center for Biotechnology Information (NCBI): the blue-crowned hanging-parrot's GenBank records can be found here.

World Bird Info: taxonomic information of many of the world's bird species can be found here.

Xeno-canto Avian Sound Library: open-source sound library for bird calls.

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Literature and References


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