

= Javan slow loris =

The Javan slow loris (*Nycticebus javanicus*) is a strepsirrhine primate and a species of slow loris native to the western and central portions of the island of Java , in Indonesia . Although originally described as a separate species , it was considered a subspecies of the Sunda slow loris (*N. coucang*) for many years , until reassessments of its morphology and genetics in the 2000s resulted in its promotion to full species status . It is most closely related to the Sunda slow loris and the Bengal slow loris (*N. bengalensis*) . The species has two forms , based on hair length and , to a lesser extent , coloration .

Its forehead has a prominent white diamond pattern , which consists of a distinct stripe that runs over its head and forks towards the eyes and ears . The Javan slow loris weighs between 565 and 687 g (1 @. @ 25 and 1 @. @ 51 lb) and has a head @-@ body length of about 293 mm (11 @. @ 5 in) . Like all lorises it is arboreal , and moves slowly across vines and lianas instead of jumping from tree to tree . Its habitat includes primary and secondary forests , but it can also be found in bamboo and mangrove forests , and on chocolate plantations . Its diet typically consists of fruit , tree gum , lizards and eggs . It sleeps on exposed branches , sometimes in groups , and is usually seen alone or in pairs .

The Javan slow loris population is in sharp decline because of poaching for the exotic pet trade , and sometimes for traditional medicine . Remaining populations have low densities , and habitat loss is a major threat . For these reasons the International Union for Conservation of Nature (IUCN) lists its status as critically endangered , and it has also been included on the 2008 ? 2010 list of " The World 's 25 Most Endangered Primates " . It is protected by Indonesian law and , since June 2007 , is listed under CITES Appendix I. Despite these protections , as well as its presence in several protected areas , poaching continues ; the wildlife protection laws are rarely enforced at the local level .

= = Taxonomy and phylogeny = =

The Javan slow loris (*Nycticebus javanicus*) was first described scientifically in 1812 , by the French naturalist Étienne Geoffroy Saint @-@ Hilaire . The species name *javanicus* refers to its place of origin . However , the species was not recognized for long ; by 1840 , René Primevère Lesson classified it as one of several varieties of a single species of slow loris , which he called *Bradylemur tardigradus* . In 1921 , Oldfield Thomas named a second species of slow loris from Java , *Nycticebus ornatus* .

In his 1971 review of slow loris taxonomy , taxonomist and primatologist Colin Groves recognized the Javan slow loris as a subspecies , *Nycticebus coucang javanicus* , of the Sunda slow loris (*N. coucang*) , with *ornatus* as a synonym . It was first recognized as a distinct species again in a 2000 Indonesian field guide on primates by Jatna Supriatna and Edy Hendras Wahyono . In 2008 , Groves and Ibnu Maryanto promoted it to species status , based on an analysis of cranial morphology and characteristics of pelage . Molecular analysis of DNA sequences of the D @-@ loop and cytochrome b genes demonstrated it to be genetically distinct from other slow loris species ; phylogenetically , it is sister to a clade containing the Bengal slow loris (*N. bengalensis*) and the Sunda slow loris . Due to its close resemblance to neighboring slow loris species , even rescue centers have been known to misidentify it .

There are two forms of the Javan slow loris , distinguished mainly by differences in hair length . These have occasionally been recognized as separate species , *N. javanicus* and *N. ornatus* , but are currently both classified as a single species , although their exact taxonomic status remains unclear .

= = Anatomy and physiology = =

The Javan slow loris weighs between 565 and 687 g (1 @. @ 25 and 1 @. @ 51 lb) and is similar in appearance to the largest slow loris , the Bengal slow loris . Its face and back are marked with a

distinct stripe that runs over the crown and forks , leading to the eyes and ears , which leaves a white diamond pattern on the forehead . Its color is yellowish @-@ gray . In contrast , its head , neck , and shoulders have cream hues . Like the Bornean slow loris (*N. menagensis*) , it lacks the second incisor (I2) in its dentition .

The Javan slow loris is larger than both of the other Indonesian slow lorises , the Sunda slow loris and the Bornean slow loris . Based on averages determined from six specimens obtained from the illegal wildlife trade in Java , other morphometric parameters are as follows : head length , 59 @.@ 2 mm ; muzzle length , 19 @.@ 9 mm ; head breadth , 43 @.@ 6 mm ; body breadth , 250 @.@ 8 mm ; head and body length , 293 @.@ 1 mm ; chest girth , 190 @.@ 8 mm ; dark percentage girth (girth measurement of zone with dark dorsal hair , measured as a percent of girth circumference) , 48 @.@ 0 mm ; neck circumference , 136 @.@ 7 mm ; tail length , 20 @.@ 4 mm ; humerus length , 67 @.@ 2 mm ; radius length , 71 @.@ 8 mm ; femur length , 83 @.@ 2 mm ; tibia length , 85 @.@ 9 mm ; hand span , 59 @.@ 1 mm ; foot span , 70 @.@ 3 mm ; and ear length , 16 @.@ 8 mm .

The ornatus morphotype is most reliably distinguished by its longer fur , averaging 26 @.@ 8 mm compared to 22 @.@ 4 mm in javanicus . Other distinguishing characteristics include overall color (generally light brown in ornatus compared with brown to reddish in javanicus) , and amount of brown coloring in the fur (ornatus has less brown than javanicus , resulting in a lighter @-@ colored ventral region) .

In the 1860s , the brain of the Javan slow loris was examined by William Henry Flower , a comparative anatomist who specialized in the primate brain . In addition to detailing the organization , shape , and measurements of its brain , he noted that the form and surface markings were comparable to that of lemurs . He argued against grouping strepsirrhines with Insectivora (a now @-@ abandoned biological grouping) and noted that the brain had features transitional between other primates and " inferior " mammals such as bats and carnivorans .

= = Behavior and ecology = =

Like other lorises , the Javan slow loris is nocturnal and arboreal , relying on vines and lianas . However , the animal has been observed moving on the ground to cross open spaces in disturbed habitat . It moves through the canopy at heights between 3 and 22 m (9 @.@ 8 and 72 @.@ 2 ft) and is often encountered at heights between 1 @.@ 5 and 9 @.@ 5 m (4 @.@ 9 and 31 @.@ 2 ft) .

The Javan slow loris will eat fruit , lizards , eggs , and chocolate seeds . It is also known to eat the gum of trees of the genus *Albizia* , in the legume family , Fabaceae , as well as from the palm genus *Arenga* (family Arecaceae) . Javan slow lorises are seen alone or in pairs and are sometimes found sleeping in groups . Instead of sleeping in nest holes , they sleep curled up on branches . Like other slow lorises , the Javan slow loris has a distinctive call that resembles a high @-@ frequency whistle . The species is a host for the parasitic flatworm , *Phaneropsolus oviforme* .

= = Distribution = =

The species is found only on the western and central portion of the island of Java in Indonesia . Its presence has been confirmed in the Dieng Mountains , and it is known to be found in low densities at Gunung Gede Pangrango National Park (in montane cloud forests) and Mount Halimun Salak National Park , often only where human disturbance is minimal . It inhabits both primary and secondary disturbed forest , and can be found from sea level to 1 @,@ 600 m (5 @,@ 200 ft) , although it is more commonly found at higher elevations since lower elevations tend to be deforested . A study in 2000 showed that in addition to primary and secondary forest , the Javan slow loris could be found in bamboo forests , mangrove forests , and on plantations ? particularly chocolate plantations . In 2008 , they were observed in West Java to occupy mixed @-@ crop home gardens , tolerating high levels of human disturbance .

= = Conservation = =

The Javan slow loris is listed by the International Union for Conservation of Nature (IUCN) as " critically endangered , " primarily due to a rapid decline in population . For the 21 ? 24 years prior to its 2008 assessment by the IUCN ? which corresponds to three generations for the species ? its numbers had dropped by at least 50 % . Population data for the species is sparse , but a few studies have shown a low population density of 0 @. @ 20 to 0 @. @ 02 individuals per km² .

Its numbers are still decreasing , primarily because of poaching . In Indonesia , it is sometimes used in traditional medicine , because of myths of it having magical and curative properties , but it is more frequently sold as an exotic pet . The species is easily captured because of its slow movement , nocturnal habits , and its tendency to sleep on exposed branches . They are both actively sought for the pet trade and collected opportunistically when felling forests . Its habitat is also in decline , although most of the habitat loss occurred by the mid @-@ 1980s . Within its range , human land use is intense . Environmental niche modelling indicates that the Javan slow loris is more threatened by habitat loss than other slow loris species . For these reasons , the Javan slow loris has been included on " The World 's 25 Most Endangered Primates " published by the IUCN Species Survival Commission Primate Specialist Group (IUCN / SSC PSG) , the International Primatological Society (IPS) , and Conservation International (CI) .

Along with all other slow lorises , the Javan slow loris was elevated from CITES Appendix II to CITES Appendix I in June 2007 , offering it increased protection from commercial trade . It is also protected by Indonesian law , but according to loris researchers Nekaris and Jaffe , " effective law enforcement with respect to wildlife protection laws is all but non @-@ existent in Indonesia " . The species can be found in several protected areas , but its numbers are uncertain . Captive collections of the Javan slow loris can be found in Prague , Czech Republic , Jakarta , Indonesia , and Singapore .