GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: ***Pycnonotus jocosus***

Pycnonotus jocosus 正體中文 **System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Aves	Passeriformes	Pycnonotidae

Common name Rödörad bulbyl (Swedish), Rødørebylbyl (Norwegian), Rotohrbülbül (German), roodoor-buulbuul (Dutch), tepeli arapbülbülü (Turkish), bylbyl cervenosluchý (Slovak), kouraun (Japanese), kyläbulbuli (Finnish), bulbul (English, Mauritius), merl konde (English, Seychelles), le kondé (English, Mauritius), bilbil krwawnik (Polish), bilbil zbroczony (Polish), bulbul cervenouchý (Czech), bulbul baffirossi (Italian), bulbul orphée (French), bulbul orfeo (Spanish), Crested Bulbul (English), red-whiskered bulbul (English)

Synonym

Similar species *Pycnonotus cafer*

Summary Pycnonotus jocosus (red-whiskered bulbul) is a bird native to Asia which has become invasive to several parts of the world. It has been found to damage crops, compete with native species and spread invasive plants.

view this species on IUCN Red List

Species Description
Pycnonotus jocosus (red-whiskered bulbul) is a passerine avian. Adults measure 17-23cm in length with a wingspan of 28cm and weigh 23-42 g. Identifiable characteristics include its distinctive red ear patch and undertail coverts, a dark brown upperside, tan flanks, and white underside, a thin and notched beak, oval-shaped bristled nostrils, and a black shoulder spur and black head with a pointed crest. The legs and toes are usually short and have little strength. Males and females are alike in colour. Immature bulbuls resemble adults except that they lack the red ear patch (Honolulu, undated; Islam and Williams, 2000; Sibley, 2003). During the non-breeding season in North America, they assemble in communal roosts beginning in July and August and ending in January. Roosts usually consist of 40–100 individuals and inhabit a range of about 5.1 km2. Birds disperse following gonadal enlargement and begin seeking a mate. After the breeding season they return to their same roost (Carleton and Owre, 1975).

Notes
Pycnonotus jocosus (red-whiskered bulbul) is very gregarious in the nonbreeding season and can often be seen foraging in large communal roosts (Islam & Williams, 2000). Their song is a chattering and musical scolding. Their call is a staccato *kink-a-jou* (Sibley, 2003).

Lifecycle Stages
Altricial young are cared for and fed by both parents for about 13 days, and are completely independent after 3 weeks (NatureServe, 2007). The young are fed primarily soft-bodied insects in early stages and then drupes and berries (Islam & Williams, 2000). The longest recorded adult life span in the wild is 11 years .

Uses
Pycnonotus jocosus (red-whiskered bulbul) is a popularly kept cage bird (Clergeau & Mandon-Dalger, 2001).

Habitat Description
Pycnonotus jocosus (red-whiskered bulbul) has colonized many different terrestrial habitats in temperate, tropical, and subtropical climates (Clergeau & Mandon-Dalger, 2001). In its native range it prefers wet habitats 500–2000m elevation and is common along forest edges, woodlands, cultivated areas and urban parks and gardens. In its introduced range it is mostly found in suburban areas, parks and gardens. However, it is also well adapted to native woodland, scrubland and forest of higher elevations (e.g. Islam & Williams, 2000; Linnebjerg *et al*., in press). *P. jocosus* is known to nest in shrubs, small, trees, hedges, trellises and verandas of buildings or other available ledges or sites 1–9m off the ground. Since they are well adapted to human-altered environments much of their spread is facilitated by human development (Islam & Williams, 2000) but they are also known to reach high numbers on remote and largely unpopulated islands (e.g. Roberts, 1988).

Reproduction
Oviparous. Sexual. Breeding usually occurs in early warm months. In Florida pairs are formed February through July and breeding occurs from March to June. *Pycnonotus jocosus* (red-whiskered bulbul) is capable of up to three broods per year as in India, but usually only rears two. Each clutch usually consists of 2-4 pale pink eggs with red spots. Incubation is done by both sexes and lasts 12-14 days (NatureServe, 2007; Australian Museum, 2003).

Nutrition
Pycnonotus jocosus (red-whiskered bulbul) is a frugivore that also consumes insects, spiders, and small reptiles. They have been found to eat fruits, berries, figs, seeds, buds, nectar, pollen, flowers, and leaves from a wide variety of plants throughout the world. Insect diet includes caterpillars, scale insects, flies, moths, ants and beetles (Islam & Williams, 2000).

General Impacts
Pycnonotus jocosus (red-whiskered bulbul) has been found to damage commercial crops, compete with and displace native passerines, prey on endemic young birds and arthropods, and spread invasive plant species (Clergeau & Mandon-Dalger, 2001; Linnebjerg *et al*. 2009; Linnebjerg *et al*., in press). In California this species has signficantly damaged citrus crops. On Oahu Island, Hawai'i it consumes commercial fruits and flowers such as papaya and orchids. Damage to agriculture has been documented in other parts of its introduced range in Florida, La Réunion and Mauritius. On Mauritius *P. jocosus* has also reduced populations of endemic passerine native white-eyes (*Zosterops* spp.), spiders of the genus *Neophilia*, and geckos. In Southern Florida it competes for resources with migratory and wintering birds (Islam & Williams, 2000). *P. jocosus* is also known to distribute invasive alien plant species. Among these include: giant bramble (*Rubus alceifolius*), jujube tree (*Cordia interrupta*), Koster's curse (*Clidemia hirta*), largeleaf lantana (*Lantana camara*), bugweed (*Solanum mauritianum*), Brazilian peppertree (*Schinus terebinthifolius*), strawberry guava (*Psidium cattleianum*), privet (*Ligustrum robustum*) and Indian laurel (*Litsea glutinosa*) in the Mascarene Islands (Simberloff & Von Holle, 1999; Mandon-Dalger, 2004; Linnebjerg *et al*., in press); and Brazilian jasmine (*Jasminum fluminense*), Brazilian peppertree (*Schinus terebinthifolius*), Bengal fig (*Ficus benghalensis*), and *Lantana* spp. in Florida (Carleton & Owre, 1975).

Management Info
It is recommended that management actions for *Pycnonotus jocosus* (red-whiskered bulbul) be taken within the first few years of introduction in order to be effective. This is to take advantage of its period of slow dispersal and population growth following introduction. Research has shown that *P. jocosus* spreads slowly for the first five or more years. After this initial period, which is variable by location with some instances taking as long as ten years, the populations spread and grow more rapidly, rendering eradication arduous and ineffective. Researchers cite its roosting behaviour as the cause of this low initial dispersion rate (Clergeau, 2001)
Preventative measures: Most of its spread may be contributed to human transport, be it accidental escape from zoos or gardens or intentional and unintentional release of cage birds. More care in the keeping and transport of red-whiskered bulbuls would greatly reduce its spread to new locations. Governmental preventative measures have been fairly successful in the United States. The U.S. Department of Agriculture Code of Federal Regulation strictly prohibits their importation to the U.S. and its territories. The Hawai'i Department of Land and Natural Resources distributed brochures and flyers to the public in the 1980s informing them about *P. jocosus* and requesting that any sightings be reported. No new populations were established outside of Oahu (Islam & Williams, 2000).
Cultural: Since red-whiskered bulbuls are common cage birds in many parts of the world, the public should be informed of environmental threats they impose and be cautious in their keeping and transport.
Physical: Eradication or relocation is an option in invaded areas. *P. jocosus* was successfully captured using cages with a decoy and fruit as bait by a pest control program in La Réunion (Amiot *et al*., 2007).
Chemical: The use of pesticides and bird lime by farmers to protect their crops from bulbuls in the Mascarenes has been successful (Clergeau & Mandon-Dalger, 2000). Repellents methiocarb, ziram, and methyl anthranilate were successfully used to reduce the consumption of papaya by the closely related red-vented bulbul (*Pycnonotus cafer*) by 65% (Islam & Williams, 2000).

Pathway

Principal source:
Amiot, C., Lorvelec, O., Mandon-Dalger, I., Sardella, A., Lequilliec, P., & Cleargeau, P. 2007. Rapid morphological divergence of introduced Red-whiskered Bulbuls *Pyconotus jocosus* in contrasting environments. *Ibis, 149*: 482-489.\r\n
Carleton, A.R. &Owre, O.T. 1975. The Red-whiskered Bulbul in Florida: 1960-71. *The Auk, 92*(1): 40-57.\r\n\r\n
Clergeau, P. & Mandon-Dalger, I. 2001. Fast colonization of an introduced bird: the case of *Pycnonotus jocosus* on the Mascarene Island. *Biotropica 33*(3): 542-546.\r\n\r\n
Islam, K., & Williams, R.N. 2000. Red-vented Bulbul (*Pycnonotus cafer*) and Red-whiskered Bulbul (*Pycnonotus jocosus*). In A. Poole & F. Gills (Eds.), *The Birds of North America, No. 520*. The Birds of North America, Inc., Philadelphia, PA.\r\n
Linnebjerg, J.F., Hansen, D.M. & Olesen, J.M. 2009. Gut-passage effect of the introduced Red-whiskered Bulbul (*Pycnonotus jocosus*) on germination of invasive plant species in Mauritius. *Austral Ecology 34*:272–277. \r\n\r\n
Linnebjerg, J.F., Hansen, D.M., Bunbury, N. & Olesen, J.M. In press. Diet composition of the invasive red-whiskered bulbul *Pycnonotus jocosus* in Mauritius. *Journal of Tropical Ecology*.

Compiler: National Biological Information Infrastructure (NBII) & IUCN SSC Invasive Species Specialist Group (ISSG)

Review: Jannie Linnebjerg, National Environmental Research Institute, Department of Arctic Environment, Aarhus University
Nancy Bunbury, Seychelles Island Foundation

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ALIEN RANGE

[3] AUSTRALIA
[1] FRENCH SOUTHERN TERRITORIES
[1] INDIA
[1] JAPAN
[1] MAURITIUS
[1] MEXICO
[1] REUNION
[2] SEYCHELLES
[2] SPAIN
[1] UNITED KINGDOM
[1] VIET NAM
[1] BELGIUM
[1] GERMANY
[2] INDONESIA
[1] MALAYSIA
[1] MAYOTTE
[1] PAKISTAN
[1] SAUDI ARABIA
[1] SINGAPORE
[1] UNITED ARAB EMIRATES
[3] UNITED STATES
[1] ZIMBABWE

Red List assessed species 3: VU = 1; NT = 1; LC = 1;

Hypsipetes nicobariensis **NT**
Hypsipetes olivaceus **VU**
Trichonephila inaurata **LC**

BIBLIOGRAPHY

31 references found for **Pycnonotus jocosus**

Managment information

Amiot, C., Lorvelec, O., Mandon-Dalger, I., Sardella, A., Lequilliec, P., and Cleargeau, P. 2007. Rapid morphological divergence of introduced Red-whiskered Bulbuls *Pyconotus jocosus* in contrasting environments. Ibis, Vol. 149: 482-489.
Summary: Journal article describing morpholgical differences in isolated populations of Red-whiskered Bulbuls in Reunion.

Beaver, K. & Mougal, J. (Eds). 2010. Review of invasive alien species control and eradication programmes in Seychelles. Under project Mainstreaming prevention and control measures for invasive alien species into trade, transport and travel across the production landscape. Unpublished report by the Plant Conservation Action Group Seychelles. 89 pp.

Bomford, M., 2003. Risk Assessment for the Import and Keeping of Exotic Vertebrates in Australia. Bureau of Rural Sciences, Canberra.
Summary: Available from: http://www.feral.org.au/wp-content/uploads/2010/03/PC12803.pdf [Accessed August 19 2010]

Carleton, A.R. and Owre, O.T. 1975. The Red-whiskered Bulbul in Florida: 1960-71. The Auk Vol. 92, No. 1: 40-57.
Summary: Detailed journal article concerning *Pycnonotus jocosus* invasion of Florida.
Available from: http://elibrary.unm.edu/sora/Auk/v092n01/p0040-p0057.pdf [Accessed 14 August 2007].

Clergeau, P. and Mandon-Dalger, I. 2001. Fast colonization of an introduced bird: the case of *Pycnonotus jocosus* on the Mascarene Island. Biotropica Vol. 33, Number 3: 542-546.
Summary: Journal article comparing population growth of different populations of red-whiskered bulbuls in the Mascarenes and elsewhere.

Clergeau, P., Madon-Dalger, I., Georger, S. 2002. Mise en place d une gestion intégrée d un oiseau ravageur des cultures à la Reunion. Ingénieries, 30: 71-80.
Summary: La gestion intégrée des oiseaux ravageurs des cultures est une alternative aux luttes chimiques ou mécaniques, et s'inscrit dans les projets d'agriculture durable. La prise en compte des différents acteurs en recherche/ingénierie/action et des différents niveaux fonctionnels tant administratif que biologique est un des moyens de construction d une telle gestion. Cette démarche a été appliquée pour répondre aux dégâts causés à la production fruitière par un oiseau récemment introduit à la Réunion.

Fédération départementale des groupements de défense contre les organismes nuisibles
Summary: Une fiche synthétique préparée par la FDGON.
Available from: http://www.fdgdon974.fr/spip.php?rubrique16 [Accessed 4 December 2012]

General information

Amiot, C., ; Lorvelec, O., Mandon-Dalger, I., Sardella, A., Lequilliec, P., Clergeau, P. 2007. Rapid morphological divergence of introduced Red-whiskered Bulbuls *Pycnonotus jocosus* in contrasting environments. Ibis, 149 (3), 482-489
Summary: Cette étude montre la rapidité de mise en œuvre du processus d'adaptation évolutive puisqu'il aura fallu 10 générations seulement pour induire des différences morphologiques entre des populations de Bulbul Orphée de différentes régions de La Réunion.

Australian Museum. 2003. Factsheets: Red-whiskered Bulbul.
Summary: Website offered by The Australian Museum containing facsheets on resident species.
Available from: http://www.austmus.gov.au/factsheets/red_whiskered_bulbul.htm [Accessed 14 August 2007]

Avibase 2004. The world bird database: Red-whiskered Bulbul (*Pycnonotus jocosus*) (Linnaeus, 1758).
Summary: Avibase is an avian database resource containing international distributions, comon names, and other information.
Available from: http://www.bsc-eoc.org/avibase/avibase.jsp?pg=summary&lang=EN&id=31CD97E13F98E4BA&ts=1190739280234 [Accessed 21 September 2007].

Banks, R.C. and Laybourne, R.C. 1968. The Red-whiskered Bulbul in Hawaii. The Auk Vol. 85, No. 1: 141.
Summary: Short journal article containing relevant information such as the Florida sub-species pf Red-whiskered bulbul and its origin.
Available from: http://elibrary.unm.edu/sora/Auk/v085n01/p0141-p0141.pdf [Accessed 14 September 2007].

BirdLife International 2004. *Pycnonotus jocosus*. IUCN 2006. 2006 IUCN Red List of Threatened Species.
Summary: Database of possibly threatened bird species.
Available from: http://www.iucnredlist.org/search/details.php/52212/all [Accessed 13 August 2007].

Cheke, A. 1987. An ecological history of the Mascarene Islands, with particular reference to extinctions and introductions of land vertebrates. In: A.W. Diamond (Ed.), *Mascarene Island Birds* (pp. 5-89). Cambridge University Press, Cambridge.

Clergeau, P. & Mandon-Dalger, I. 2001. Fast colonization of introduced bird: the case of *Pycnonotus jocosus* on Mascarene Islands. Biotropica, 33, 542-546.

Islam, K., and R. N. Williams. 2000. Red-vented Bulbul (*Pycnonotus cafer*)and Red-whiskered Bulbul (*Pycnonotus jocosus*). In The Birds of North America, No. 520 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Summary: Detailed and comprehensive survey on the Red-whiskered and Red-vented Bulbuls by Cornell University. Part a Birds of North America database.

Available from: http://bna.birds.cornell.edu/BNA/account/Red-vented_Bulbul/ [Accessed 14 August 2007]

ITIS (Integrated Taxonomic Information System), 2008. Online Database *Pycnonotus jocosus* (Linnaeus, 1758)

Summary: An online database that provides taxonomic information, common names, synonyms and geographical jurisdiction of a species. In addition links are provided to retrieve biological records and collection information from the Global Biodiversity Information Facility (GBIF) Data Portal and bioscience articles from BioOne journals.

Available from: http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=178507 [Accessed 24 January 2008]

Leeward Community College. Honolulu Zoo. Red-whiskered Bulbul. Undated.

Summary: Website offered by the Honolulu Zoo describing the *P. jocosus*. Accredited to Leeward Community College.

Available from: http://www.honoluluzoo.org/red-whiskered_bulbul.htm [Accessed 13 August 2007]

Linnebjerg, J.F., Hansen, D.M., Bunbury, N., & Olesen, J.M. 2010. Diet composition of the invasive red-whiskered bulbul *Pycnonotus jocosus* in Mauritius. Journal of Tropical Ecology, 26: 347-350.

Linnebjerg, J.F., Hansen, D.M. & Olesen, J.M. 2009. Gut-passage effect of the introduced Red-whiskered Bulbul (*Pycnonotus jocosus*) on germination of invasive plant species in Mauritius. *Austral Ecology 34*:272-277.

Long, J. L. (1981). Introduced Birds of the World. David and Charles. London.

Mandon-Dalger, I. 2002. Sélection de l'habitat et dynamique d'invasion d'un oiseau introduit, le cas du Bulbul orphée à la Réunion. Thèse de l'Université de Rennes1, Rennes. 209 pp.

Mandon-Dalger, I., Clergeau, P., Tassin, J., Riviere, J., and Gatti, S. 2004. Relationships between alien plants and an alien bird species on Reunion Island. Journal of Tropical Ecology. Vol. 20: 635-642.

Summary: Article focusing on the interaction between alien birds and plants describing many examples and the ecological feedback that takes placce between an introduced bird and plants it unknowingly introduces as food.

Mandon-Dalger, I., Clergeau, P., Tassin, J., Riviere, J., & Gatti, S. 2004. Relationships between alien plants and an alien bird species on Reunion Island. Journal of Tropical Ecology, 20, 635-642.

Summary: Ce papier analyse le rôle des oiseaux exotiques dans la dissémination de certaines plantes exotiques envahissantes de la Réunion.

Mandon-Dalger, I., Le Corre, M., Clergeau, P., Probst, J.-M., & Besnard, N. 1999. Modalités de colonisation de l'île de la Réunion par le Bulbul Orphée *Pycnonotus jocosus*. Revue d Ecologie (Terre et Vie), 54, 283-295.

Summary: Les résultats de cette étude montrent entre autre que le Bulbul Orphée se cantonne pas aux milieux anthropisés de basse altitude comme dans les autres pays qu il a colonisés, ni comme les autres espèces introduites à la Réunion. Il pénètre dans les forêts, y compris dans les formations indigènes.

NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life. Version 6.2. *Pycnonotus jocosus*. NatureServe, Arlington, Virginia.

Summary: Web factsheet providing information on *P. jocosus*.

Available from: http://www.natureserve.org/explorer/servlet/NatureServe?searchName=Pycnonotus+jocosus [Accessed 17 August 2007].

Probst J.-M. 1997. Animaux de la Réunion. Azalées Editions. 168 pp.

Prys-Jones, R.P., Prys-Jones, M.S. & Lawley, J.C. 1981. The birds of Assumption Island, Indian Ocean: Past and future. *Atoll Research Bulletin 248*: 1-16.

Sibley, C.G. & Monroe, B.L. Jr. 1993. *Distribution and Taxonomy of Birds of the World - a Supplement*. Yale University Press, London.

Sibley, D. 2003. The Sibley Field Guide to Birdsof Eastern North America. New York: Alfred A. Knopf Publishing: 327.

Summary: Field guide to birds of North America[Accessed 13 August 2007].

Simberloff, D. and Von Holle, B. 1999. Positive interactions of nonindigenous species: invasional meltdown? Biological Invasions. Vol.1: 21-32.

Summary: Journal article depicting some plants spread by *P. jocosus*

Van Ripper III, C., Van Ripper, S.G., and Berger, A.J. 1979. The Red-whiskered Bulbul in Hawaii. Wilson Bulletin: Vol. 91, No. 2: 323-328.

Summary: A journal article describing the invasion of the Red-whiskered bulbul in Hawaii.

Available from: http://elibrary.unm.edu/sora/Wilson/v091n02/p0323-p0328.pdf [Accessed 13 August 2007].