

*Columba livia*  正體中文

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Aves	Columbiformes	Columbidae

**Common name**

bládúgva (Faroese), domaci golob (Slovenian), pigeon biset domestique (French), kaljutuvi (Estonian), rock dove (English), paloma de castilla (Spanish), rock dove pigeon (English), pigeon (English), colom roquer (Basque), haitz-uso (Basque), kawara-bato (Japanese), gradski Golub (Croatian), pigeon domestique (French), sizy Golub (Russian), homing pigeon (English), bládúva (Faroese), paloma doméstica (Spanish), pigeon de ville (French), sizyj golub' (Russian), golub pecinar (Croatian), pigeon biset (French), rock pigeon (English), domestic dove (English), calmane creggey (Manx), colu'r aille (Gaelic, Irish), domestic pigeon (English), colomp salvadi (Friulian), colom roquer (Galician), feral rock pigeon (English), pomba brava (Gaelic, Irish), feral pigeon (English), dobato (Japanese), pecinar (Croatian), common pigeon (English), kesykyyhky (Finnish), carrier pigeon (English), piccione domestico (Italian), szirti galamb (Hungarian), kalliokyyhky (Finnish), piccione torraiolu (Italian), piccione selvatico semidomestico (Italian), Tkhakapuyt Aghavni (Armenian), klippedue (Danish), piccione (Italian), piccione selvatico (Italian), piccione terraiolu (Italian), calman-creige (Scots), pombo-das-rochas (Portuguese), div gulab (Macedonian), colom wyls (Cornish), kawarabato (Japanese), kolomm an garrek (Cornish), naminis karvelis (Lithuanian), kieminis (Lithuanian), colomba salvaria (Ladino), balandis (Lithuanian), pombo o pombo-doméstico (Portuguese), klinšu balodis (Latvian), bydue (Norwegian), tudun tal-gebel (Maltese), pombo da rocha (Portuguese), pustynnik (Polish), tzidu (Sardinian), columba selvadia (Romansh), columba da chasa (Romansh), tidu (Sardinian), columbu de is arrocas (Sardinian), columbu aresti (Sardinian), bákteduvvá (Northern Sami), porumbel de stâncă (Romanian), golab miejski (Polish), bareski-golumbaika (Romany), columbu agreste (Sardinian), baresko-golumbo (Romany), agreste (Sardinian), tidori (Sardinian), didu (Sardinian), paloma casera (Spanish), rotsduif (Dutch), colomen y graig (Welsh), pichon (Breton), ruve (Fijian, Fiji), dubet (Breton), golab skalny (Polish), klippduva (Swedish), skalen g'l'b (Bulgarian), ziyw golub (Sorbian, Lower), Xixella (Catalan), golub pecinar (Serbian), divlji golub (Serbian), tamduva (Swedish), sizij golub (Ukrainian), colomen ddôf (Welsh), güvercin (Turkish), holub domáci (Czech), holub skalní (Czech), šzyzy holub (Belarusian), colm aille (Gaelic, Irish), yuan ge (Chinese), dziwi holb (Sorbian, Upper), Felsentaube (German), paloma bravia (Spanish), paloma (Spanish), Verwilderte Haustaube (German), kolombo (Esperanto), Haustaube, Strassentaube (German), bjargdúfa (Icelandic), húsdúfa (Icelandic), paloma común (Spanish), pëllumbi i egër i shkëmbit (Albanian)

## Synonym

## Similar species

## Summary

*Columba livia* is native to Europe and has been introduced worldwide as a food source, or for game. These pigeons prefer to live near human habitation, such as farmland and buildings. They cause considerable damage to buildings and monuments because of their corrosive droppings. They also pose a health hazard, since they are capable of transmitting a variety of diseases to humans and to domestic poultry and wildlife.



[view this species on IUCN Red List](#)

## Species Description

Rock pigeons have a grey body with a whitish rump, two black bars on the secondary wing feathers, a broad black band on the tail, and red feet. The body colour can vary from grey to white, tan, and black. Body mass is highly variable ranging from 243 to 359g (Johnston & Johnson 1989) and averaging 28cm in length (Williams & Corrigan 1994). When they take off, their wing tips touch, making a characteristic clicking sound. When they glide, their wings are raised at an angle (Williams & Corrigan 1994).

## Lifecycle Stages

Eggs are laid 8 to 12 days after mating, with a normal clutch size of 1 to 2 eggs, but up to 4. The eggs hatch after 16 to 21 days incubation and the young fledge at 4 to 6 weeks of age. More eggs are laid before the first clutch leaves the nest. Sexual maturity occurs after 6 months of age. In captivity, rock pigeons commonly live up to 15 years. In urban populations, however, rock pigeons seldom live more than 3 or 4 years (Johnston & Janiga 1995, Williams & Corrigan 1994).

## Uses

Rock pigeons are kept and bred by pigeon fanciers for homing and racing competition (Robbins 1995) and in some locations such as Japan (Eguchi & Amano 2004) and the Galápagos Islands (Phillips *et al.* 2003) they are kept as a food source. In cities worldwide rock pigeons are a source of pleasure for many people who enjoy watching and feeding them.

## Habitat Description

Rock pigeons prefer human habitations and are commonly found around farm yards, grain elevators, feed mills, parks, city buildings, bridges, and other structures (Williams & Corrigan 1994). In some settings, rock pigeons will roost and nest in natural areas and make daily foraging flights of several kilometres (Baldaccini *et al.* 2000, Earle & Little 1993, Phillips *et al.* 2003).

## Reproduction

Rock pigeons are monogamous. The male provides nesting material and guards the female and the nest. The young are fed pigeon milk, a liquid solid substance secreted in the crop of the adult (both male and female) that is regurgitated. Breeding may occur at all seasons, but peak reproduction occurs in the spring and fall. A population of rock pigeons usually consists of equal numbers of males and females (Williams & Corrigan 1994).

## Nutrition

Rock pigeons are primarily granivorous, but will consume insects and other food items (Johnston & Janiga 1995). In rural areas, rock pigeons forage primarily in fields for grains, such as corn, wheat, barley, and oats. In winter when the ground is snow-covered, spilled grain at storage sites (e.g., silos and grain elevators) is an important food source. When available, high protein food items, such as peas, are preferred by rock pigeons. They mostly rely on free-standing water but can also use snow to obtain water (Williams & Corrigan 1994).



## General Impacts

Rock pigeons are known to transmit pigeon ornithosis, encephalitis, [Exotic Newcastle Disease](#), cryptococcosis, toxoplasmosis, salmonella food poisoning, and several other diseases (Weber 1979, Long 1981). Rock pigeons and their nests are infested with ectoparasites, such as ticks, fleas, and mites, which can cause health problems for humans (Dautel *et al.* 1991, Haag & Spiewak 2004).

Rock pigeon droppings can accelerate the deterioration of buildings and increase cost of maintenance (Haag 1995). Large amounts of droppings may kill vegetation and produce an objectionable odour. Around grain handling facilities, pigeons consume and contaminate large quantities of food destined for human or livestock consumption (Little 1994). Furthermore, rock pigeons located around airports can be a threat to human safety because of potential bird-craft collisions (Seamans *et al.* 2007). In the U.S. alone, they cause \$1.1 billion dollars of damage in urban areas annually (Pimentel *et al.* 1999). In the Galápagos, the rock pigeon is the carrier of *Trichomonas gallinae*, a potentially fatal disease for endemic Galápagos doves and poultry (Harmon *et al.* 1987).

## Management Info

**Preventative measures:** Several techniques are available to prevent rock pigeons from establishing in an area or to exclude them if they are already established (Williams & Corrigan, 1994). Habitat modification includes physically altering roosting and nesting sites and removing food and water sources. The latter two aspects are critical for long-term control and require cooperation from the public. Exclusion methods, such as blocking access to roost sites or installing anti-perching devices are effective. Rock pigeons can also be prevented from perching or roosting by applying various chemical repellents to these areas.

**Physical:** Williams & Corrigan (1994) suggested that frightening, repellents, trapping, shooting, and nest removal may be useful and practical approaches to manage rock pigeons in conjunction with habitat modification measures.

**Chemical:** Toxicants, including both oral and contact poisons, may also be used to control rock pigeons. Oral poisons require prebaiting before the toxicant can be applied and can pose significant risks to non-target species (Williams & Corrigan, 1994). Fumigants can also be used to control rock pigeons, however, they are generally not practical (Williams & Corrigan, 1994).

Please follow this link for more details about preventative measures, physical and chemical control methods [Hygnstrom, et al. 1994](#).

**Integrated management:** Eradication campaigns have been carried out on Isabela, San Cristóbal and Santa Cruz islands using a combination of methods: shooting, catching them by hand, using baits laced with alpha-chloralose to stupefy them (Phillips, R. B., unpublished data).

## Pathway

Europeans moving to new locations were a source of early introduced populations (Robbins 1995). Pigeons have been introduced as a food source (Eguchi & Amano 2004)

**Principal source:** [Williams, D.E. and Corrigan, R.M. 1994 Pigeons \(Rock Doves\) in Hygnstorm, S.E., Timm, R.M. and Larson, G.E., Prevention and control of wildlife damage](#)

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

**Review:** R. Brand Phillips, PhD Candidate Department of Biology University of New Mexico, Albuquerque, USA

**Publication date:** 2008-05-29

## ALIEN RANGE

[1] AMERICAN SAMOA

[1] ANGUILLA

[7] AUSTRALIA

[2] ANGOLA

[22] ARGENTINA

[1] AUSTRIA

[1] BAHAMAS	[1] BANGLADESH
[1] BARBADOS	[1] BELGIUM
[6] BELIZE	[1] BERMUDA
[1] BES ISLANDS (BONAIRE, SINT EUSTATIUS AND SABA)	[1] BHUTAN
[8] BOLIVIA	[1] BOTSWANA
[27] BRAZIL	[1] BRUNEI DARUSSALAM
[1] CAMBODIA	[3] CAMEROON
[12] CANADA	[3] CAYMAN ISLANDS
[13] CHILE	[28] COLOMBIA
[1] COMOROS	[8] COSTA RICA
[15] CUBA	[1] CZECH REPUBLIC
[1] DJIBOUTI	[30] DOMINICAN REPUBLIC
[22] ECUADOR	[13] EL SALVADOR
[1] FIJI	[1] FRENCH GUIANA
[3] FRENCH POLYNESIA	[1] GIBRALTAR
[1] GRENADA	[1] GUADELOUPE
[22] GUATEMALA	[10] GUYANA
[4] HAITI	[17] HONDURAS
[1] HONG KONG	[1] HUNGARY
[24] INDIA	[5] INDONESIA
[14] JAMAICA	[1] JAPAN
[1] JERSEY	[1] KIRIBATI
[1] LESOTHO	[1] LIECHTENSTEIN
[1] MADAGASCAR	[1] MALAYSIA
[1] MALDIVES	[1] MARTINIQUE
[1] MAYOTTE	[31] MEXICO
[1] MICRONESIA	[1] MONTSERRAT
[1] NETHERLANDS	[1] NEW ZEALAND
[16] NICARAGUA	[1] NORFOLK ISLAND
[9] PANAMA	[1] PAPUA NEW GUINEA
[16] PARAGUAY	[24] PERU
[1] PORTUGAL	[7] PUERTO RICO
[1] SAINT HELENA	[1] SAINT KITTS AND NEVIS
[1] SAINT LUCIA	[1] SAINT PIERRE AND MIQUELON
[1] SAINT VINCENT AND THE GRENADINES	[1] SAMOA
[1] SINGAPORE	[6] SOUTH AFRICA
[2] SPAIN	[1] SRI LANKA
[9] SURINAME	[1] SWAZILAND
[1] SWITZERLAND	[1] TAIWAN
[1] THAILAND	[1] TONGA
[1] TRINIDAD AND TOBAGO	[1] TURKS AND CAICOS ISLANDS
[52] UNITED STATES	[16] URUGUAY
[19] VENEZUELA	[1] WALLIS AND FUTUNA
[1] ZIMBABWE	

## BIBLIOGRAPHY

18 references found for *Columba livia*

### Management information

Cossios E. Daniel, 2010. Vertebrados naturalizados en el Perú: historia y estado del conocimiento (Naturalised vertebrates in Peru: history and state of knowledge) Rev. peru. biol. 17(2): 179 - 189 (Agosto 2010)

Summary: Available from: <http://sisbib.unmsm.edu.pe/BVrevistas/biologia/v17n2/pdf/a07v17n2.pdf> [Accessed 23 February 2011]

[Galapagos National Park and the Charles Darwin Foundation \(GNP and CDF\), 2004. Galapagos Invasive Species: Harmful animals.](#)

**Summary:** It provides information about the management methods in eradication of pigeons in three island in galapagos.

Available from: <http://www.hear.org/galapagos/invasives/topics/management/vertebrates/projects/doves.htm> [Accessed 17 November 2006].

[Phillips, R. B., Snell, H. L., and Vargas, H. 2003. Feral rock doves in the Galapagos Islands: biological and economic threats. Noticias de Galapagos 62:6-11.](#)

[Varnham, K. 2006. Non-native species in UK Overseas Territories: a review. JNCC Report 372. Peterborough: United Kingdom.](#)

**Summary:** This database compiles information on alien species from British Overseas Territories.

Available from: <http://www.jncc.gov.uk/page-3660> [Accessed 10 November 2009]

[Williams, D.E. and Corrigan, R.M. 1994. Pigeons \(Rock Doves\) in Hygnstorm, S.E., Timm, R.M. and Larson, G.E., Prevention and control of wildlife damage :E87-E96.](#)

**Summary:** This article provides detailed information about general characteristics of *Columba livia* and the management method for control and prevention.

Available from: <http://digitalcommons.unl.edu/icwdmhandbook/69/> [Accessed 17 November 2006].

## General information

[Avibase \( The World Bird Database\), Online database Columbia livia](#)

**Summary:** Avibase is an extensive database information system about all birds of the world, containing over 2 million records about 10,000 species and 22,000 subspecies of birds, including distribution information, taxonomy, synonyms in several languages and more.

Avibase is available from: <http://www.bsc-eoc.org/avibase/avibase.jsp?pg=home&lang=EN>

This page is available from:

<http://www.bsc-eoc.org/avibase/avibase.jsp?pg=summary&lang=EN&id=04127535BD0788BC&ts=1164602181109> [Accessed 17 November 2006].

[Buden, D.W. 2000. A comparison of 1983 and 1994 bird surveys of Pohnpei, Federated States of Micronesia. In Wilson Bull 112\(3\): 403-410.](#)

**Summary:** This article provides a comparison of bird surveys done separately on Pohnper island in 1983 and 1994.

[CONABIO. 2008. Sistema de informaci3n sobre especies invasoras en M3xico. Especies invasoras - Aves. Comisi3n Nacional para el Conocimiento y Uso de la Biodiversidad. Fecha de acceso.](#)

**Summary:** English:

The species list sheet for the Mexican information system on invasive species currently provides information related to Scientific names, family, group and common names, as well as habitat, status of invasion in Mexico, pathways of introduction and links to other specialised websites. Some of the higher risk species already have a direct link to the alert page. It is important to notice that these lists are constantly being updated, please refer to the main page (<http://www.conabio.gob.mx/invasoras/index.php/Portada>), under the section Novedades for information on updates.

Invasive species - birds is available from: [http://www.conabio.gob.mx/invasoras/index.php/Especies\\_invasoras\\_-\\_Aves](http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Aves) [Accessed 30 July 2008]

Spanish:

La lista de especies del Sistema de informaci3n sobre especies invasoras de m3xico cuenta actualmente con informaci3n acerca de nombre cient3fico, familia, grupo y nombre com3n, as3 como h3bitat, estado de la invasi3n en M3xico, rutas de introducci3n y ligas a otros sitios especializados. Algunas de las especies de mayor riesgo ya tienen una liga directa a la p3gina de alertas. Es importante resaltar que estas listas se encuentran en constante proceso de actualizaci3n, por favor consulte la portada (<http://www.conabio.gob.mx/invasoras/index.php/Portada>), en la secci3n novedades, para conocer los cambios.

Especies invasoras - Aves is available from: [http://www.conabio.gob.mx/invasoras/index.php/Especies\\_invasoras\\_-\\_Aves](http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Aves) [Accessed 30 July 2008]

[Eguchi, K. and Amano, H.E. 2004. Spread of exotic birds in Japan. In Ornithological Science 3:3-11.](#)

**Summary:** This article provides information about the exotic birds introduced to Japan, the effects and impact caused by the introduction and the general legal control of the birds introduction.

Available from: [http://www.jstage.jst.go.jp/article/osj/3/1/3/\\_pdf](http://www.jstage.jst.go.jp/article/osj/3/1/3/_pdf) [Accessed 21 November 2006].

[Forys, E.A. and Allen, C.R. 1999. Biological invasions and deletions: community change in south Florida. In Biological Conservation 87:341-347](#)

**Summary:** This study used endangered and exotic fauna of South Florida to test three hypothesis about community change, which are body-mass difference hypothesis, diet difference hypothesis and niche replacement hypothesis.

[ITIS \(Integrated Taxonomic Information System\), 2005. Online Database Columbia livia](#)

**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=177071](http://www.itis.gov/servlet/SingleRpt/SingleRpt?search_topic=TSN&search_value=177071) [Accessed 5 February 2008]

Post Fiji Web Site: Pigeons of Fiji Stamp Issue: [www.stamps.fiji.htm](http://www.stamps.fiji.htm).

[Robbins, C. S. 1995. Non-native birds. Pages 437-440 in LaRoe, E. T., Farris, G. S., Puckett, C. E., Doran, P. D., and Mac, M. J. ed. Our Living Resources. National Biological Service, Washington, D.C. xi, 530 pp.](#)

**Summary:** This article presents the history and status of some non-native birds introduced to North America.

[Ryan, P. 1999. Fiji's Natural Heritage. Exile Publishing.](#)

[Schorger, A.W. 1952. Introduction of the domestic pigeon. Auk 69:462-463](#)

**Summary:** It is an article to focus on the process of introduction of pigeon into United States.

Available from: <http://elibrary.unm.edu/sora/Auk/v069n04/p0462-p0463.pdf> [Accessed 21 November 2006].

[Trainor, C. R. 2002. The birds of Adonara, Lesser Sundas, Indonesia, Forktail 18: 93-100](#)

**Summary:** This is a brief survey of avifauna on Adonara island.

Available from: <http://orientalbirdclub.org/publications/forktail/18pdfs/Trainor-Adonara.pdf> [Accessed 21 November 2006].



# GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Columba livia*

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Watling, D. 1999. Pocket poster guide to the Birds of Fiji. Landbirds.

Watling, D. and Pernetta, J.C. 1978. The Introduced and Native Terrestrial Vertebrates of Fiji. Pacific Science: Vol. 32, no. 3.