FULL ACCOUNT FOR: Columba livia

System: Terrestrial

<table>
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<th>Kingdom</th>
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<td>Chordata</td>
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Common name

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), haitzuso (Basque), kawara-bato (Japanese), gradski Golub (Croatian), pigeon domestique (French), sziy Golub (Russian), homing pigeon (English), bladuva (Faroeese), paloma domestica (Spanish), pigeon de ville (French), szigy 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), keskykyhky (Finnish), carrier pigeon (English), piccione domestico (Italian), sziriti galamb (Hungarian), kalliokyyhky (Finnish), piccione torraiolo (Italian), piccione selvatico semidomestico (Italian), Tkhakapuyt Aghavni (Armenian), klippedue (Danish), piccione (Italian), piccione selvatico (Italian), piccione terraialo (Italian), calman-creige (Scots), pombo-das-rochas (Portuguese), div golub (Macedonian), colom wyls (Cornish), kawarabato (Japanese), kolomm an garrek (Cornish), naminis karvelis (Lithuanian), kieminis (Lithuanian), colomba salvaria (Ladino), balandis (Lithuanian), pombo o pombo-domesticó (Portuguese), klinšu balodis (Latvian), bydue (Norwegian), tudun tal-gebel (Maltese), pombo da rocha (Portuguese), pustynnik (Polish), tizdu (Sardinian), columna selvadia (Romansh), columna da chasa (Romansh), tido (Sardinian), columbu de is arrocas (Sardinian), columbu aresti (Sardinian), båkteduvvá (Northern Sami), porumbel de stânca (Romanian), golub domaci (Polish), bareski-golumbaika (Romany), columbu agreste (Sardinian), baresko-golumbo (Romany), agreste (Sardinian), lidori (Sardinian), didu (Sardinian), paloma casera (Spanish), rotsduif (Dutch), colomen y graig (Welsh), pichen (Breton), ruve (Fijian, Fiji), dubet (Breton), golub skalny (Polish), klipduva (Swedish), skalen g‘t’b (Bulgarian), ziwy golub (Sorbian, Lower), Xixella (Catalan), golub pecinar (Serbian), divli golub (Serbian), tamduva (Swedish), szij golub (Ukrainian), colomen ddöf (Welsh), guvercin (Turkish), holub domáci (Czech), holub skalní (Czech), šyzy 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), bjargduva (Icelandic), bládúgva (Faroeese), húsdufa (Icelandic), paloma comú (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 blank 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)


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ALIEN RANGE
[1] ANGUILLA  [22] ARGENTINA
[1] BOTSWANA  [27] BRAZIL
GLOBAL INVASIVE SPECIES DATABASE
FULL ACCOUNT FOR: Columba livia

[1] GUATELPE [22] GUATEMALA
[31] MEXICO [1] MICRONESIA
[52] UNITED STATES [16] URUGUAY
[1] ZIMBABWE

BIBLIOGRAPHY
18 references found for Columba livia

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


Summary: This database compiles information about alien species from British Overseas Territories. Available from: http://www.jncc.gov.uk/page-3660 [Accessed 10 November 2009].


Summary: This article provides detailed information about the management 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:


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


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

[Accessed 30 July 2008]

Spanish:
La lista de especies del Sistema de información sobre especies invasoras de México cuenta actualmente con información acerca de nombre científico, familia, grupo y nombre común, así como detalles, estado de la invasión, rutas de introducción y vínculos a otros sitios especializados. Algunas de las especies de mayor riesgo ya tienen una lista directa a la página de alerta. Es importante notar que estas listas se encuentran en constante proceso de actualización. Por favor consulte la portada (http://www.conabio.gob.mx/invasoras/index.php/Portada), en la sección de novedades, para conocer los cambios.

Especies invasoras - Aves is available from: http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Aves

[Accessed 30 July 2008]


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 [Accessed 21 November 2006].


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 Columba 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.


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


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


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


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

