

Passer domesticus  正體中文

System: Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Aves	Passeriformes	Passeridae

Common name gorrion casero (Spanish), town sparrow (English), Europese huismuis (English), house sparrow (English), Gorrion domestico (English, Dominican Republic), moineau domestique (French), house sparrow (English), English sparrow (English)

Synonym

Similar species

Spiza americana, *Passer montanus*, *Passer hispaniolensis*

Summary

Passer domesticus (the house sparrow) is a small bird, native to Eurasia and northern Africa, that was intentionally introduced to the Americas. *Passer domesticus* are non-migratory birds that are often closely associated with human populations and are found in highest abundance in agricultural, suburban and urban areas. They tend to avoid woodlands, forests, grasslands and deserts. Particularly high densities of *Passer domesticus* were found where urban settlements meet agricultural areas. They may evict native birds from their nests and out-compete them for trophic resources. Early in its invasion of North America, *Passer domesticus* began attacking ripening grains on farmland and was considered a serious agricultural pest. Recent surveys indicate populations are declining.



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

Species Description

The male house sparrow (*Passer domesticus*) has a brown back with black streaks. The top of the crown is grey, but the sides of the crown and nape are chestnut red. The chin, throat and upper breast are black and the cheeks are white. Females and juveniles are less colourful. They have a grey-brown crown and a light brown or buff eye stripe. The throat, breast and belly are greyish-brown and unstreaked (Cornell Lab of Ornithology, 2007).

Notes

North American survey data indicates that the house sparrow (*Passer domesticus*) populations are declining, particularly in maritime regions and in the eastern and central United States. Changes in agricultural practices, in particular the shift to monoculture crop plantings, have been suggested as the cause. In the UK, population decline seems to be related to reduced winter survival (Hole *et al.* 2002)

Uses

The house sparrow (*Passer domesticus*) has been commended for feeding on insect species considered pests, such as moths, cabbage worms, and cotton caterpillars (Burleigh 1958, Sprunt and Chamberlain 1970, in Aguirre and Poss, 2000).



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Passer domesticus*

Habitat Description

House sparrows (*Passer domesticus*) may evict native birds from their nests and out-compete them for trophic resources. For the most part, *P. domesticus* is always found around man-made structures and lives around cities, towns and farms. It is non-migratory. Along the Gulf coast of North America it is found in salt marsh scrub in disturbed areas (Toups and Jackson 1987, in Aguirre and Poss, 2000). Foraging habitat includes fields and agricultural areas (Aguirre and Poss, 2000).

Reproduction

House sparrow (*Passer domesticus*) nests are built from dried vegetation, feathers, string and paper. Eggs are laid at any time in the nesting period. One to eight eggs can be present in a clutch, with the possibility of four clutches per nesting season. Incubation begins after all the eggs have been laid. Both males and females incubate the eggs for short periods of a few minutes each. Incubation lasts for 10 to 14 days.

Nutrition

House sparrow (*Passer domesticus*) diet consists mostly of weed and grass seeds, grains and insects. Where available, it also feeds on cultivated grains, fruits and vegetables. Although it forages mostly on the ground in open areas, *P. domesticus* will perch on weed stalks to take seeds and search tree barks for insects. In urban areas, garbage constitutes a significant part of the birds diet and the consumption of grains by urban birds is less significant than in rural areas (D. Summers-Smith, 1963).

General Impacts

Despite their small size, house sparrows (*Passer domesticus*) are quite aggressive. House sparrows are known for displacing native species through competition by out-competing them for trophic resources. In rural areas they may evict native birds from their nests. Some species reported as being driven away by *P. domesticus* include the bluebird and the Carolina wren, as well as a variety of woodpeckers and martins. Early in its invasion of North America, *P. domesticus* began eating ripening grains, such as wheat, oats, corn, barley and sorghum, and was considered a serious agricultural pest. Peas, turnips, cabbage and nearly all young vegetables are also attacked, as well as apples, cherries, grapes, peaches, plums, pears, strawberries and raspberries. Additionally, *P. domesticus* are a pest on poultry farms where they can consume large quantities of chicken feed.



Management Info

Preventative measures: The Bureau of Rural Sciences, Australia, recently developed a risk assessment model ([Bomford, 2003](#)) which has been endorsed by the National Vertebrate Pests Committee and may be used as the basis for future exotic species import applications. To assign an exotic species to a threat category, three risk scores are calculated: the risk that (1) an escaped or released individual would harm people, (2) escaped or released individuals would establish a wild free-living population (3) the species would be a pest if a wild population did establish. These three risk scores are then used to assign the exotic species to one of four threat categories: extreme, serious, moderate or low.

Passer domesticus has been assigned an **Extreme** threat category for Australia. These animals should not be allowed to enter, nor be kept in any State or Territory. (Special consideration may be given to scientific institutions on a case by case basis.) Any species that has not been assessed previously should be considered to be in the Extreme Threat Category and should be treated accordingly, until a risk assessment is conducted.

Physical: According to Glacking (2000), there are several ways to control *P. domesticus* and prevent sparrow problems. One is habitat modification. Roosting and nesting sites can be reduced by blocking entrances larger than 2cm. Buildings can be designed or altered to eliminate resting places. In some areas, building codes are modified and architectural committees review plans to reduce nesting sites.

Food sources can be reduced by removing edible human refuse, protecting small crops with bird netting and practicing clean livestock feeding techniques. Feed also needs to be covered to protect it from bird droppings. Bird-resistant varieties of plants can be planted.

More direct methods of control include shooting, trapping, poisoning and repelling. House sparrows can be shot with air guns and small arms containing BB's and dust shot. Trap types include funnel, automatic, triggered and mist nets. Trapping is generally difficult, as sparrows quickly learn to avoid traps, nets, etc. (Summers-Smith, 1963). *P. domesticus* can be repelled with noise, such as fireworks or alarms. Bird glues and Nixalite (trademark for "porcupine wire") annoy the sparrows. They can also be scared away with scarecrows and motorised hawks. Destroying nests can be another method of reducing *P. domesticus* populations.

Chemical: The standard poison used is Avitrol (trademark for 4-Aminopyridine). It is most effective in winter, when food is scarce and bait is readily accepted. Grain is typically used, however, it is important to be aware of any local poison control laws before proceeding. Naphthalene is an olfactory repellent.

Pathway

The house sparrows (*Passer domesticus*) association with human beings has been in large part responsible for its successful invasion of North America (Aguirre and Poss, 2000).

Principal source: [Aguirre and Poss, 2000. *Passer domesticus*](#)

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

Updates with support from the Overseas Territories Environmental Programme (OTEP) project XOT603, a joint project with the Cayman Islands Government - Department of Environment

Review: Dr. Andras Liker Department of Zoology, University of Veszprém. Veszprém Hungary.

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ALIEN RANGE

[1] AUSTRALIA

[1] BELIZE

[14] CANADA

[1] CURACAO

[1] FALKLAND ISLANDS (MALVINAS)

[1] GUADELOUPE

[1] BAHAMAS

[1] BERMUDA

[1] CENTRAL AMERICA

[1] DOMINICAN REPUBLIC

[1] FRENCH GUIANA

[1] MAYOTTE



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Passer domesticus*

[2] MEXICO
[1] NEW ZEALAND
[1] REUNION
[1] SAINT MARTIN (FRENCH PART)
[1] SOUTH AMERICA
[1] TANZANIA, UNITED REPUBLIC OF
[1] VIRGIN ISLANDS, BRITISH

[1] NEW CALEDONIA
[1] PERU
[1] SAINT HELENA
[1] SAINT PIERRE AND MIQUELON
[1] SOUTHERN AFRICA
[51] UNITED STATES

Red List assessed species 6: CR = 1; EN = 1; LC = 4;

[Haemorhous mexicanus](#) LC
[Neophema chrysogaster](#) CR
[Sialia sialis](#) LC

[Hirundo rustica](#) LC
[Petrochelidon pyrrhonota](#) LC
[Tachycineta cyaneoviridis](#) EN

BIBLIOGRAPHY

23 references found for *Passer domesticus*

Management information

[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]

Clergeau, Phillipe; Levesque, Anthony and Lorvelec, Olivier., 2004. The precautionary principle and biological invasion: the case of the house Sparrow on Lesser Antilles. *International Journal of pest management* 50(2) 83-89

Summary: This paper summarizes the different steps of a decision-making protocol applied to the recent establishment of an exotic species, the House Sparrow *Passer domesticus*, in the Lesser Antilles.

[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]

[Glacking, J. 2000. English or House Sparrow. Lasting Forests.](#)

Summary: A report on management of *P. domesticus*.

Available from: <http://fwie.fw.vt.edu/rhgiles/speciessm/engspar.htm> [Accessed 22 July 2003]

[Murray, C. and C. Pinkham. 2002. Towards a Decision Support Tool to Address Invasive Species in Garry Oak & Associated Ecosystems in BC. Prepared by ESSA Technologies Ltd., Victoria, B.C. for the GOERT Invasive Species Steering Committee, Victoria, 96 pp.](#)

Summary: Available from: <http://www.goert.ca/documents/GOEDSTreport.pdf> [Accessed 13 February 2008]

Summers-Smith, ., (1963) *The House Sparrow* Collins, London

Summary: Information on nesting habits and management.

[The Garry Oak Ecosystems Recovery Team \(GOERT\)., 2003. Annotated Bibliographies on the Ecology and Management of Passer domesticus](#)

Summary: Available from: http://www.goert.ca/documents/Bib_passdome.pdf [Accessed 13 February 2008]

[The Garry Oak Ecosystems Recovery Team \(GOERT\)., 2003. Field manual of Passer domesticus](#)

Summary: Available from: http://www.goert.ca/documents/InvFS_passdome.pdf [Accessed 13 February 2008]

[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]

General information

[Aguirre, W., Poss, S. 2000. Passer domesticus. University of Southern Mississippi.](#)

Summary: A detailed report on *P. domesticus*.

Available from: http://www.gsmfc.org/nis/nis/Passer_domesticus.html [Accessed 20 July 2003].

[Avibase, 2008 - listes d oiseaux mondiales. Guyane française.](#)

Summary: Available from: <http://www.bsc-eoc.org/avibase/checklist.jsp?lang=FR®ion=gf&list=clements> [Accessed 10 April 2008]

[Biodiversity and Environmental Resource Data System \(BERDS\) Species profile Passer domesticus](#)

Summary: The Biodiversity & Environmental Resource Data System (BERDS) is a comprehensive biodiversity and environmental data warehouse and research system built with one purpose - to enhance collaborative research and conservation efforts in Belize by providing shared access to not only accurate biodiversity- and environment-related data but also the tools necessary to begin research and investigation of that shared data.

BERDS available from: <http://www.biodiversity.bz/about/>

This page available from: http://www.biodiversity.bz/find/species/profile/profile.phtml?species_id=2569 [Accessed 1 June 2006]

Clergeau, P., Levesque, A., Lorvelec, O. 2004. The precautionary principle and biological invasion: the case of the house Sparrow on Lesser Antilles. *International Journal of pest management* 50(2): 83-89

Summary: Cet article récapitule les différentes étapes d'un protocole de prise de décision suite à l'établissement récent du Moineau domestique en Guadeloupe



GLOBAL INVASIVE SPECIES DATABASE

FULL ACCOUNT FOR: *Passer domesticus*

[CONABIO. 2008. Sistema de información sobre especies invasoras en México. Especies invasoras - Aves. Comisión 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 [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 hábitat, estado de la invasión en México, rutas de introducción y ligas a otros sitios especializados. Algunas de las especies de mayor riesgo ya tienen una liga directa a la página de alertas. Es importante resaltar 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 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]

Cornell Lab of Ornithology. 2007. The Birdhouse Network: House Sparrow *Passer domesticus*

[Gough, G., Sauer, J., Iliff, M. 1998. Patuxent Bird Identification Infocenter. Patuxent Wildlife Research Center.](#)

Summary: A short description of *P. domesticus* and similar species.

Available from: <http://www.mbr-pwrc.usgs.gov/id/framlst/i6882id.html> [Accessed 22 July 2003]

Hole., D. G. et al. (2002) Nature 418: 931-932

Summary: Notes on distribution and spread.

[ITIS \(Integrated Taxonomic Information System\), 2005. Online Database *Passer domesticus*](#)

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.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Passer+domesticus&p_format=&p_ifx=plgt&p_lang= [Accessed March 2005]

Levesque, A., Clergeau, P. 2002. First colonization of the Lesser Antilles by the House Sparrow *Passer domesticus*. El Pitirre, 15, 73-74.

[Muséum national d'Histoire naturelle \[Ed\]. 2005. *Passer domesticus* Inventaire national du Patrimoine naturel](#)

Summary: Base de données sur le patrimoine naturel français.

Available from:

http://inpn.mnhn.fr/isb/servlet/ISBServlet?action=Espece&typeAction=10&pageReturn=ficheEspeceDescription.jsp&numero_taxon=4525 [Accessed 10 April 2008]

Perrins, C. (ed) 1998 The complete birds of the Western Palearctic on CD-ROM, version 1. - Oxford University Press

Summary: General Information, Notes on similar species.

[Sauer, J.R., J.E. Hines, and J. Fallon. 2003. House Sparrow \(*Passer domesticus*\) Summer Distribution Map. The North American Breeding Bird Survey, Results and Analysis 1966 - 2002. Version 2003.1, United States Geological Survey, Patuxent Wildlife Research Center, Laurel, MD.](#)

Available from: <http://www.mbr-pwrc.usgs.gov/bbs/htm96/map617/ra6882.html> [Accessed 1 September 2003]

Summary: A map of *P. domesticus* summer distribution in the USA and Canada.

The Birdhouse Network (TBN). 2001. House Sparrow Cornell Lab of Ornithology.