

*Sturnus vulgaris*  

**System:** Terrestrial

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Aves	Passeriformes	Sturnidae

**Common name** etourneau sansonnet (French, France), English starling (English), European starling (English), estornino pinto (Spanish, Spain), blackbird (English, USA), common starling (English), étourneau sansonnet (French), Europäischer Star (German)

### Synonym

**Similar species** *Molothrus aeneus*, *Quiscalus quiscula*, *Agelaius phoeniceus*, *Turdus merula*

### Summary

Native to Europe, Asia and North Africa, *Sturnus vulgaris* (the European starling) has been introduced globally, save in neotropical regions. The starling prefers lowland habitats and is an aggressive omnivore. *Sturnus vulgaris* cost hundreds of millions of dollars in agricultural damage each year and contribute to the decline of local native bird species through competition for resources and nesting spaces.



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

### Species Description

The European starling (*Sturnus vulgaris*) is a small bird approximately 21.5cm, long and weighing around 70 to 100gms. Iridescent green glossed feathers cover the nape, breast and back of the bird, while the wings are black, sometimes with a green or purple veneer. During the winter white flecking may appear on the starling's breast. (Chow, 2000)

### Notes

European starlings (*Sturnus vulgaris*) often form huge flocks of upwards of 3,000 birds.

### Lifecycle Stages

Eggs incubate in the nest for up to 15 days. The juvenile European starling (*Sturnus vulgaris*) will stay in the nest for 21 to 23 days and may continue to beg parents for food for a few days after leaving the nest. Banding studies have shown that European starlings can live up to 21 years in the wild. (Chow, 2000, CWBO, 2004)

### Uses

European starlings (*Sturnus vulgaris*) play an active role in the control of insect populations. Many people also consider the starling to be aesthetically pleasing, and keep them as pets. (Adeney, 2001)

### Habitat Description

European starlings (*Sturnus vulgaris*) prefer lowland habitats to more mountainous terrain. They are secondary cavity nesters, using extant cracks, crevices, and cavities created by other species. During breeding season the European starling requires holes for nesting and vegetation fields for feeding. The rest of the year it will utilise a wider range of habitats from moorland to salt marshes. European starlings are highly adaptable when selecting nest hollows, e.g. fence posts, roof linings under guttering (there has been an observation of a starling nest in the wool of a live sheep) (John Tracey, pers.comm., 2004)



## Reproduction

Reproduction is sexual; oviparous. Breeding season in the Northern Hemisphere generally begins late March and runs through to early July. The southern hemisphere breeding season runs between September and December. European starling clutches contain between 4-6 blue-green eggs. Females may lay as many as three clutches in a single breeding season. (Kern, 2003, Chow, 2000)

## Nutrition

European starlings (*Sturnus vulgaris*) are omnivores and subsist mainly on seeds, insects, invertebrates, plants and fruit. (Chow, 2000)

## General Impacts

European starlings (*Sturnus vulgaris*) cause damage to agricultural crops. When significant numbers are present starling flocks may descend on fruit and grain crop fields to forage, causing massive damage and can have a heavy economic effect. European starlings are extremely aggressive omnivores, and will compete with native fauna for food. Open bill probing is most commonly used for ground invertebrates, which is their preferred food. Hence this provides the European starling with an evolutionary advantage over frugivores. Fruit damage is often found to be caused by a higher proportion of juveniles, which have underdeveloped probing skills. Usurping nests by contamination (as well as physical competition) is also a major problem (e.g. native parrots use little, if any, bedding, whereas starlings will rapidly fill and contaminate tree hollows). European starlings are also a public nuisance and can damage infrastructures, roof linings, etc. and negatively effect aesthetics (Weber 1979).

## Management Info

Physical: Manual methods such as exclusion, trapping, and shooting have been employed in an attempt to control European starling (*Sturnus vulgaris*) populations. Mechanical controls include scaring with the use of sonic devices. (Adeney, 2001; Kern, 2003).

## Pathway

European starlings (*Sturnus vulgaris*) were introduced to New Zealand to control local insect populations. European starlings (*Sturnus vulgaris*) were allegedly introduced to the U.S. as part of a movement to introduce all the birds of Shakespeare to the States. People may move European starlings (*Sturnus vulgaris*) to new areas by taking their pet birds with them. Introduced by acclimatisation societies.

**Principal source:** Long, J. L., 1981. Introduced Birds of the World. Reed, Sydney.  
Weber, W. J., 1979. Health hazards from pigeons, starlings and English sparrows. Thomson Publications, California.

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## ALIEN RANGE

[2] AUSTRALIA

[1] BOTSWANA

[1] NEW ZEALAND

[5] UNITED STATES

[1] BERMUDA

[2] CANADA

[1] NORTH AMERICA

**Red List assessed species 7: CR = 1; EN = 3; VU = 3;**

[Cyanoramphus cookii](#) **EN**

[Lathamus discolor](#) **EN**

[Polytelis swainsonii](#) **VU**

[Tachycineta euchrysea](#) **VU**

[Cyanoramphus novaezelandiae](#) **VU**

[Neophema chrysogaster](#) **CR**

[Tachycineta cyaneoviridis](#) **EN**

## BIBLIOGRAPHY

29 references found for *Sturnus vulgaris*

### Management information

Airola, Daniel A; Grantham, Jesse. Jones and Stokes, Purple Martin population status, nesting habitat characteristics, and management in Sacramento, California *Western Birds*. 34(4). 2003. 235-251.

**Summary:** Impacts of Starling population on purple martin population.

[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]

[Department of Agriculture and Food, Western Australia \(WA\), 2007. Starling updates](#)

**Summary:** Available from: <http://www.agric.wa.gov.au/content/pw/vp/bird/starlings.htm> [Accessed 13 February 2008]

James, Francis C. 1997, Nonindigenous Birds. Pages 139-156 in Daniel Simberloff, Don C. Schmitz, Tom C. Brown, editors. *Strangers in Paradise Impact and Management of Nonindigenous Species in Florida*. Island Press, Washington D.C. 360 pp.

**Summary:** Chapter on nonindigenous bird species in Florida. Contains information on Management

Kern, William J. 2004. European Starling.

**Summary:** A website with basic ecology information as well as economic and health impacts of the starling. This site also details several methods of control.

Long, J. L. (1981). *Introduced Birds of the World*. (Reed: Sydney.)

**Summary:** Detailed information on the introductions of introduced birds of the world

[Mack, R. N and W. M. Lonsdale., 2002. Eradicating invasive plants: Hard-won lessons for islands. In \*Turning the tide: the eradication of invasive species\*: 311-318. Veitch, C.R. and Clout, M.N.\(eds\). IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.](#)

**Summary:** Uses *Clidemia hirta* in Hawaii as an eradication case study. *Clidemia* is in the Melastomataceae and somewhat similar ecologically to miconia.

Eradication case study in *Turning the tide: the eradication of invasive species*.

[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]

The Garry Oak Ecosystems Recovery Team (GOERT)., 2003. Annotated Bibliographies on the Ecology and Management of *Sturnus vulgaris*

The Garry Oak Ecosystems Recovery Team (GOERT)., 2003. Field manual of *Sturnus vulgaris*

[Timmins, S. M. and H. Braithwaite. 2002. Early detection of invasive weeds on islands. In \*Turning the tide: the eradication of invasive species\*: 311-318. Veitch, C.R. and Clout, M.N.\(eds\). IUCN SSC Invasive Species Specialist Group. IUCN. Gland. Switzerland and Cambridge. UK.](#)

**Summary:** Eradication case study in *Turning the tide: the eradication of invasive species*.

Tracey, P.J., Woods, R., Roshier, D., West, P., Saunders, G. The role of wild birds in the transmission of avian influenza for Australia: an ecological perspective. *Emu*, 2004, 104, 109-124

**Summary:** Notes on starlings as carriers of avian influenza virus.

[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]

Weber, W. J. (1979). *Health hazards from pigeons, starlings and English sparrows*. (Thomson Publications: California.)

**Summary:** Review of the confirmed and potential human health risks of pigeons, starlings and sparrows.

[WWF-Australia, Undated. Starling factsheet](#)

**Summary:** This document seeks to inform Western Australians about the threat posed by starlings, with the hope of increasing community surveillance efforts and reporting of starling sightings.

Available from: <http://wwf.org.au/publications/starling-factsheet/> [Accessed 13 February 2008]

### General information

[Adeney, Jennifer Marion. 2001. Introduced Species Summary Project: European Starling \(\*Sturnus vulgaris\*\).](#)

**Summary:** A website with good information on ecology, and control methods of the starling. Contains several photos of starlings as well. Available from: [http://www.columbia.edu/itc/cerc/danoff-burg/invasion\\_bio/inv\\_spp\\_summ/Sturnus\\_vulgaris.html](http://www.columbia.edu/itc/cerc/danoff-burg/invasion_bio/inv_spp_summ/Sturnus_vulgaris.html) [Accessed August 11, 2004].

[Chipper Woods Bird Observatory. 2004. European Starling: \*Sturnus vulgaris\* banded 12 December 1998.](#)

**Summary:** This site has detailed photographs of starling morphology. Summary information on basic ecology and conservation efforts is also included.

Available from: <http://www.wbu.com/chipperwoods/photos/estarring.htm> [Accessed August 11, 2004]

[Chow, J. 2000. \*Sturnus vulgaris\* \(On-line\). Animal Diversity Web.](#)

**Summary:** This comprehensive sight reviews ecology and impacts. It contains several good images as well.

Available from: [http://animaldiversity.ummz.umich.edu/site/accounts/information/Sturnus\\_vulgaris.html](http://animaldiversity.ummz.umich.edu/site/accounts/information/Sturnus_vulgaris.html) [Accessed August 11, 2004] .

Clergeau P., 1986. *L'Étourneau sansonnet*. Payot Lausanne ed., Lausanne.

Global Invasive Species Database (GISD) 2024. Species profile *Sturnus vulgaris*. Available from:

<https://iucngisd.org/gisd/species.php?sc=74> [Accessed 25 July 2024]

[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](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 el 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](http://www.conabio.gob.mx/invasoras/index.php/Especies_invasoras_-_Aves) [Accessed 30 July 2008]

[eNature.com, 2007. European Starling: \*Sturnus vulgaris\*.](#)

**Summary:** Available from:

<http://www.enature.com/fieldguides/detail.asp?allSpecies=y&searchText=starling&curGroupID=1&lgfromWhere=&curPageNum=2> [Accessed February 2008]

Feare C.J., 1984. The starling. Oxford University Press. Oxford

Georgia Wildlife Web. 2000. Perching Birds: European Starling, *Sturnus vulgaris*. Accessed August 11, 2004.

[Gulf States Marine Fisheries Commission \(GSMFC\), 2003. \*Sturnus vulgaris\* \(Linnaeus\).](#)

**Summary:** This site has a short summary of physical description, potential impacts in the local area and basic ecology of the starling.

Available from: [http://nis.gsmfc.org/nis\\_factsheet.php?toc\\_id=212](http://nis.gsmfc.org/nis_factsheet.php?toc_id=212) [Accessed August 11, 2004].

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

**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=Sturnus+vulgaris&p\\_format=&p\\_ifx=plgt&p\\_lang=](http://www.cbif.gc.ca/pls/itisca/taxastep?king=every&p_action=containing&taxa=Sturnus+vulgaris&p_format=&p_ifx=plgt&p_lang=) [Accessed March 2005]

Koenig, Walter D. August 2003. European Starlings and Their Effect on Native Cavity-Nesting Birds. *Conservation Biology* 17(4) 1134-

**Summary:** Journal article of a study done to gauge the effects of European starling on the native populations of cavity nesting birds.

[Komdeur, Jan, P. Wiersma, M. Magrath. 2002. Paternal Care and male mate-attraction effort in the European starling is adjusted to clutch size. \*Proceedings: Biological Sciences\* 269\(1497\): 1253-1261.](#)

**Summary:** Study done to determine differences in male starling mating behavior in relation to clutch size. And parental practices of male starlings when polygynous.

Nephew, Benjamin C., L. Romero. 2003. Behavioral, physiological, and endocrine responses of starlings to acute increases in density. *Hormones and Behavior* 44(3): 222-232

**Summary:** Study done of starling behavioral aggression with numerous individuals in a confined space.

Olsson, Ola, Mans Bruun, and Henrik G. Smith. June 2002. Starling Foraging Success In Relation to Agricultural Land Use. *Ecography* 25 (3) 363-

**Summary:** Journal article of a study done to monitor the effects of agricultural land use as a correlating factor with decline of several bird species including *Sturnus vulgaris*.