

Passer domesticus

HOUSE SPARROW

ENGLISH NAMES	house sparrow
SCIENTIFIC NAME	<i>Passer domesticus</i>
FAMILY	Passeridae (Old World Sparrow)



Photo Credit: © PHIL MYERS and animaldiversity.ummz.umich.edu

House sparrows are small, brown birds that live in communal flocks.

RANGE/KNOWN DISTRIBUTION

House sparrows are native to Europe, Asia and North Africa and have been introduced to North America, South America, South Africa, Australia and New Zealand. They were introduced to North America in 1851, when 100 birds were released in Brooklyn, New York. They are now widespread throughout North America from Canada to Mexico. House sparrows spread to Canada by 1870 and have been in British Columbia since approximately 1898.

House sparrows are strongly associated with human habitation. The densest population of the species in British Columbia occurs in the Georgia Depression.

Although still abundant, house sparrow populations have been declining in Canada since 1966. The reasons for the decline are not clear, although it may be partially due to changes in agricultural practices.

IMPACTS ON GARRY OAK AND ASSOCIATED ECOSYSTEMS

House sparrows occupy tree cavities and other nesting sites before native migratory bird species arrive. They also aggressively take over cavities occupied by native birds, destroying the nests, eggs and nestlings. House sparrows have been implicated in the declines and at-risk status of purple martins (*Progne subis*) and western bluebirds (*Sialia mexicana*) of the Georgia Depression, and are also known to compete with swallows and chickadees.

House sparrows harbour many parasites and diseases, including ticks, *Toxoplasmosis* and *Salmonella*, which may be transmitted to native birds and humans.

FIELD DESCRIPTION

House sparrows are short (15 cm in length), stocky birds with wedge-shaped bills. Vocalisations are varied, but loud “cheeps” are most common. Eggs are whitish with grey or brown spots and measure 2 cm long.

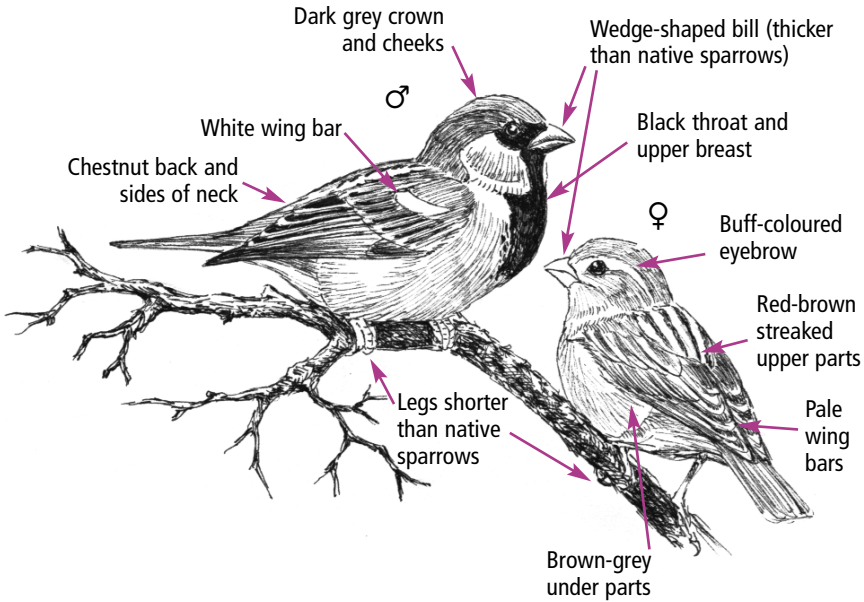


Illustration Credit: © DONALD GUNN

LIFE HISTORY

House sparrows are non-migratory. They can disperse up to 80 km per year.

House sparrows eat a wide range of arthropods, including beetles, caterpillars, butterflies and moths, grasshoppers and spiders. They also feed on flowers, grass and weed seeds and commercial bird seed. The young eat mainly insects.

House sparrows nest close to human habitation. They nest in crevices and cavities in trees, buildings and other human-made structures as well as in nest boxes. House sparrows also nest in haystacks and woodpiles and sometimes form nesting colonies. Nests are built from March to August and are made from dried plants, feathers and found objects. Females lay up to 3 clutches per year, with up to 7 eggs per clutch. Both sexes incubate the eggs for 10-13 days and feed the young, which fledge 14-17 days after hatching. House sparrows can adapt to different environmental conditions by changing their breeding strategy (i.e. number of clutches, peak breeding time) to favour the maximum number of offspring.

House sparrows are preyed on by various species of hawks and owls. Egg predators include European starlings (*Sturnus vulgaris*), Steller's jays (*Cyanocitta stelleri*), American kestrels (*Falco sparverius*) and red squirrels (*Tamiasciurus hudsonicus*).

HABITAT

House sparrows prefer habitats that have been modified by humans, including agricultural areas, woodland edges and residential, industrial and urban areas. They tend to be absent from uninhabited wilderness and dense forests.

MANAGEMENT

Develop a long-term, realistic program for invasive species removal before undertaking any work. Before taking action, expert advice should be obtained. Please refer to the introductory section of this manual.

PHYSICAL CONTROL: Limiting sparrow access to nest sites is the best control option. This is best accomplished in the fall, when competition for nest sites begins for the following spring. Use 19 mm mesh and caulking to seal all openings in buildings and remove house sparrows from nest boxes built for native birds. Consistent removal of newly built nests will eventually dissuade house sparrows.

Tactile repellents intended to prevent roosting do not discourage house sparrows.

Live box trapping or shooting house sparrows may be effective for small populations. Trapped house sparrows should be humanely euthanised and not moved to other areas.

Refer to the introductory pages for information on hunting and trapping invasive species and for humane euthanasia guidelines.

BIOLOGICAL CONTROL: Maintaining habitat for hawks and owls and installing raptor perches can support predator populations that may help control sparrows.

CHEMICAL CONTROL: Permits will not be granted for the chemical control of house sparrows except where they pose a serious health hazard. The hazard must be certified by the Workers' Compensation Board or the Health Board and all other suitable control methods must be tried first.

OTHER TECHNIQUES: Although visual or noise frightening devices can be effective for a short while, house sparrows quickly become accustomed to them. Ultrasonic devices are not effective and may cause hearing loss in other species.

PREVENTATIVE MEASURES: Bird houses for native birds can be made less attractive to house sparrows by using smaller entrance holes, removing perches and using open-top nest boxes where possible. Contact Naturescape British Columbia (www.hctf.ca/nature.htm) for house sparrow-resistant nest box designs.

Using more native plants in urban gardens may help reduce the number of house sparrows and increase populations of native birds. Pruning trees and shrubs to allow for more open growth will eliminate the dense cover that house sparrows prefer.

PERSISTENCE: House sparrows have high reproductive capacity but due to their close association with humans, it may be possible to eliminate house sparrows in natural areas by blocking nest sites in adjacent populated areas.

GENERAL COMMENTS

House sparrows host a range of diseases that can infect humans. Wear masks and protective clothing when touching bird nests or droppings.

House sparrows are listed as “Schedule C” animals under the Wildlife Act, which means they can be captured or killed anywhere in the province and at any time.

REFERENCES

Campbell, R.W., N.K. Dawe, I. McTaggart-Cowan, J.M. Cooper, G.W. Kaiser, A.C. Stewart and M.C.E. McNall, 2001. *The Birds of British Columbia, Volume 4: Passerines (Wood-Warblers through Old World Sparrows)*. UBC Press, Vancouver, BC.

Lowther, P.E. and C.L. Cink, 1992. “House Sparrow (*Passer domesticus*).” *The Birds of North America, No. 12* (A. Poole, P. Stettenheim, and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists’ Union, Washington, DC.

For more information contact the Garry Oak Ecosystems Recovery Team, or see the website at www.goert.ca