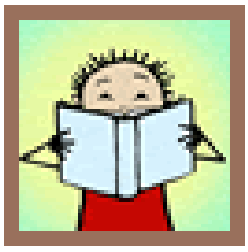
BIOLOGY, LEGAL STATUS, CONTROL MATERIALS AND DIRECTIONS FOR USE

House Sparrow (English Sparrow)

Passer domesticus

Family: Ploceidae

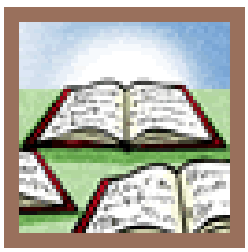


Introduction: The House Sparrow occurs naturally in most of Europe and much of Asia. Noisy and gregarious, it has followed humans all over the world and has either been intentionally or accidentally introduced. It is now the most widely distributed wild bird on the planet. Ironically, they were introduced independently in the U.S. as a means of pest control. Today the House sparrow is abundant in urban and agricultural habitats.

Identification: The house sparrow is a small, stocky songbird. It has short legs, and a thick bill. The male has a black throat and white cheeks. Size is 6 inches. The male has a reddish back and black bib, female is brown. Call is a distinctive series of slightly metallic "cheep, chirrup." Further information including audio is available at:

Cornell Lab of Ornithology

The Royal Society for the Protection of Birds



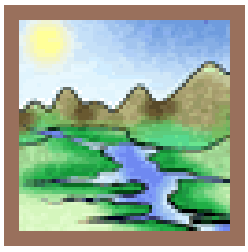
Legal Status: The California Fish and Game Code defines house sparrows as a nongame bird that may be taken and possessed by any person at any time (CFGC §

3801). There are no federal restrictions on taking house sparrows.

Damage: Grain, especially sorghums, near ranch buildings; grain in poultry rations, storage sheds, and livestock feedlots; sprouting vegetables and flower crops and newly seeded lawns, disbudding of fruit trees and ornamentals, and occasional pecking of ripening fruit. The house sparrow harbors the chicken louse and the bird louse. House sparrows are capable of transmitting fowl cholera, turkey blackhead, Newcastle disease, avian tuberculosis, Eastern equine encephalitis, pullorum, canary pox, anthrax, and numerous helminth, fungal, and protozoan parasites. The noise and filth associated with their nests are nuisances in urban areas. Further disease information is listed in the Wildlife Chapter or at www.cdc.gov.

Range: Established throughout California and the nation, the house sparrow is common though less numerous than it was before the automobile replaced the horse. This species is non-migratory.

House Sparrow

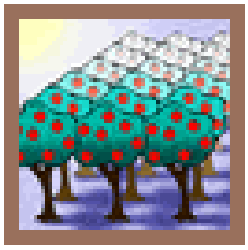


Habitat: Cities, towns, agricultural areas.

Biology: Nest building begins as early as February with both sexes participating in the activity. Nests are constructed of grass, straw, and debris and may be located almost anywhere. Three to seven eggs are laid, commonly five, and two or three broods are raised each year. The same nest has been occupied by up to four different females in a season, leading to higher estimates of the number of broods raised than is probably the case. The incubation period is 11 to 12 days and the age at first flight is about 15 days. Soon after the young leave the nest, they gather in small flocks. As the summer advances, the juveniles are joined by adults until the flock may number several hundred.

The house sparrow is primarily a grain eater. An adult bird eats about six grams of dry grain a day. Bread crumbs and other human debris substitute for grain in cities. Some weed seeds and insects are eaten, but animal food accounted for less than five percent of the annual diet (Kalmbach 1940). The young are fed

most of the animal matter. Succulent vegetable matter including fruit, young plants, and blossoms of beans and peas are also taken.



Damage Prevention and Control Methods

Exclusion: Carefully screening around poultry houses, lawns, etc., with ¾ inch or smaller mesh will keep them out.

Protect from roosting on walls by stringing plastic bird netting over vines. Alternatively, remove the shrubbery. Place netting over all openings where sparrow exclusion is desired e.g. ventilators, vents, air conditioners, building signs, eaves, overhangs, and ornamental designs.

House sparrows may be discouraged from bird feeders by installing vertical monofilament lines at 2 foot intervals around the feeders. Studies have reported that many other species of bird are not affected by this approach. House sparrows cannot access openings narrower than 1 ⅛ inches.

Habitat Modification: Destruction of roosts and nests is one method. Total removal of vegetation, such as shrubs and trees is an effective but extreme measure. In rural areas, removal of hedgerows adjacent to crop fields can assist in attractiveness to house sparrows. Remove dead fronds from palm trees.

Frightening Devices: The sparrow's range of hearing is reported between 675-11,500 Hz meaning ultrasonic devices are ineffective. Fireworks, blank shot, shell crackers, and other noise making devices, if permitted by local regulations and persistently carried out, will eventually dislodge birds from an evening tree roost. These devices are usually ineffective where they are also nesting.

Flags, foil strips, and dangling paper are relatively useless as the birds readily adapt to them.

Fumigants: None are registered.

Repellents: Sticky repellents applied to ledges, rafters, beams, etc. may help keep sparrows away. However, the ability of sparrows to cling to small projections makes this an expensive, laborious, and messy process.

Shooting: Shooting will reduce the number of birds present but is costly and rather futile as a method of crop protection.

Trapping: This is probably the most widely used method. A wide variety of traps have been used for local control of house sparrows. Traps that are designed to catch only a few birds at a time include the double funnel trap, nest trap and the commercially available elevator trap. Modified Australian crow traps and cotton trailers converted to traps have caught larger numbers of birds. Aviary wire of ½" x ½" mesh hardware cloth should be used for the wire covering of these traps. Chick scratch, fine cracked corn, milo, wheat, bread crumbs, or their combinations make good baiting material and food sources for decoy and captured birds.

Toxicants:

Avitrol® - 0.50%

Some success has been achieved with Avitrol®. Treated bait Avitrol® is a commercially prepared grain bait for use by public agencies and licensed pest control operators qualified in bird control. Use according to label directions. A permit from the county agricultural commissioner is needed for its use.

Directions for Use

General Procedure: Before exposing treated baits, thorough observations should be made to determine the number of house sparrows present, their feeding habits, their preferred locations, their daily behavior patterns, and the presence of nontarget species. Observations should continue throughout the day. Desirable locations for bait exposure should be selected during these observations. If adequate precautions are taken in selecting baiting sites no other species should be harmed.

When the daily activity pattern of the birds has been established and baiting locations selected, clean bait should be used to determine the preferred bait. Prebaiting should continue for several days or until there is good bait acceptance. Toxic bait should not be exposed until good acceptance of clean bait occurs.

Bait should be applied only under the supervision of the agricultural commissioner. Allow only responsible adults to place bait.

Placement of Bait Trays: Flat bait trays or "V" shaped troughs can be placed on rafters in garages, sheds, barns, hangers on standards, etc., where house sparrows frequent to feed or perch, and where there is no danger to man or other animals. Construct trays and troughs soundly to prevent bait spillage.

Prebaiting: Prebaiting with clean, untreated bait is essential for good control. Prebait and treated bait should be of the same grain bait. If trays and troughs are well located and birds are numerous, acceptance of bait should be well established within one week. If at the end of 10 days some birds fail to show acceptance of bait, the trap should be moved to a new location. Expose prebait sparingly but replenish as needed to keep birds feeding.

Exposing Poison Bait: When prebait is accepted freely in all or nearly all trays or troughs, they should be emptied and poison bait substituted. Spread poison bait sparingly and evenly. Place bait in troughs during early morning. Do not allow bait to become wet. After two days, remove poison bait, replace with clean bait for one week or until good acceptance is obtained. The process of prebaiting and exposing treated bait is then continued until the birds are under control or the damage period is over.

Summary of Instructions: After prebaiting, place poison bait sparingly in trays or troughs that are located in trees, shrubs, on fence posts, or on standards in areas frequented by sparrows. Remove after two days. Refill with clean bait for one week or until good acceptance is obtained; remove prebait and again expose poison bait for two days. Repeat process until birds are brought under control.

REFERENCES AND ADDITIONAL READING

Beason, Robert C., 2004. What Can Birds Hear? Proc. 21st Vertebrate Pest Conf. (R.M. Timm and W.P. Gorenzel, Eds.) Published at Univ. of Calif., Davis. Pp. 92-96.

Gadd Jr., Pierre, 1996. Use of the Modified Australian Crow Trap For the Control of Depredating Birds in Sonoma County. Proc. 17th Vertebrate Pest Conf. (R.M. Timm & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 103-107.

Gorenzel, W.P., T.P. Salmon, A.C. Crabb, 2000. A National Review of the Status of Trapping for Bird Control. Proc. 19th Vertebrate Pest Conf. (T.P. Salmon & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 5-21.

Johnston, John J., J. Cummings, D.J. Kohler, R. Stahl, 2006. Probabilistic Model to Optimize Formulation and Baiting Strategies for the Pesticide CPTH (3-chloro-4-methylaniline hydrochloride). Proc. 22nd Vertebrate Pest Conf. (R.M. Timm and J. M. O'Brien, Eds.) Published at Univ. of Calif., Davis. Pp. 440-446.

McLean, Robert G., 2006. West Nile Virus in North American Wildlife. Proc. 22nd Vertebrate Pest Conf. (R.M. Timm and J. M. O'Brien, Eds.) Published at Univ. of Calif., Davis. Pp. 311-317.

Pochop, Patricia A., R.J. Johnson, D.A. Aguero, K.M. Eskridge, 1990. The Status of Lines in Bird Damage Control-A Review. Proc. 14th Vertebrate Pest Conf. (L.R. Davis and R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 317-324.

Rodriguez, Ethel N., G. Tiscornia, M.E. Tobin, 2004. Bird Depredation in Uruguayan Vineyards. Proc. 21st Vertebrate Pest Conf. (R.M. Timm and W.P. Gorenzel, Eds.) Published at Univ. of Calif., Davis. Pp. 136-139.

Slater, Arthur J., 1998. Twenty-Five Years of Managing Birds Associated with Buildings at the University of California, Berkeley. Proc. 18th Vertebrate Pest Conf. (R.O. Baker & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 315-318.

Swindle, Kelly F., 2002. Current Uses of Avitrol for Bird Management. Proc. 20th Vertebrate Pest Conf. (R.M. Timm and R. H. Schmidt, Eds.) Published at Univ. of Calif., Davis. Pp. 114-116.

Woronecki, Paul P, R.A. Dolbeer, T.W. Seamans, 1990. Use of Alpha-Chloralose to Remove Waterfowl from Nuisance and Damage Situations. Proc. 14th Vertebrate Pest Conf. (L.R. Davis and R.E. Marsh, Eds.) Published at Univ. of Calif., Davis. Pp. 343-349.

Woronecki, Paul P., R.D. Dolbeer, 1994. Alpha-Chloralose: Current Status, Restrictions and Future Uses for Capturing Birds. Proc. 16th Vertebrate Pest Conf. (W.S. Halverson & A.C. Crabb, Eds.) Published at Univ. of Calif., Davis. Pp. 255-258.