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HOUSE FINCHES (LINNETS)

Jerry P. Clark*

Scott E. Hygnstrom†

*Primary Staff Biologist, California Department of Food and Agriculture, Sacramento, California 95814

†Extension Wildlife Damage Specialist, Department of Forestry, Fisheries and Wildlife, University of Nebraska, Lincoln, Nebraska 68583

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Jerry P. Clark
Primary Staff Biologist
California Department of Food
and Agriculture
Sacramento, California 95814

Scott E. Hygnstrom
Extension Wildlife Damage Specialist
Department of Forestry, Fisheries
and Wildlife
University of Nebraska
Lincoln, Nebraska 68583-0819

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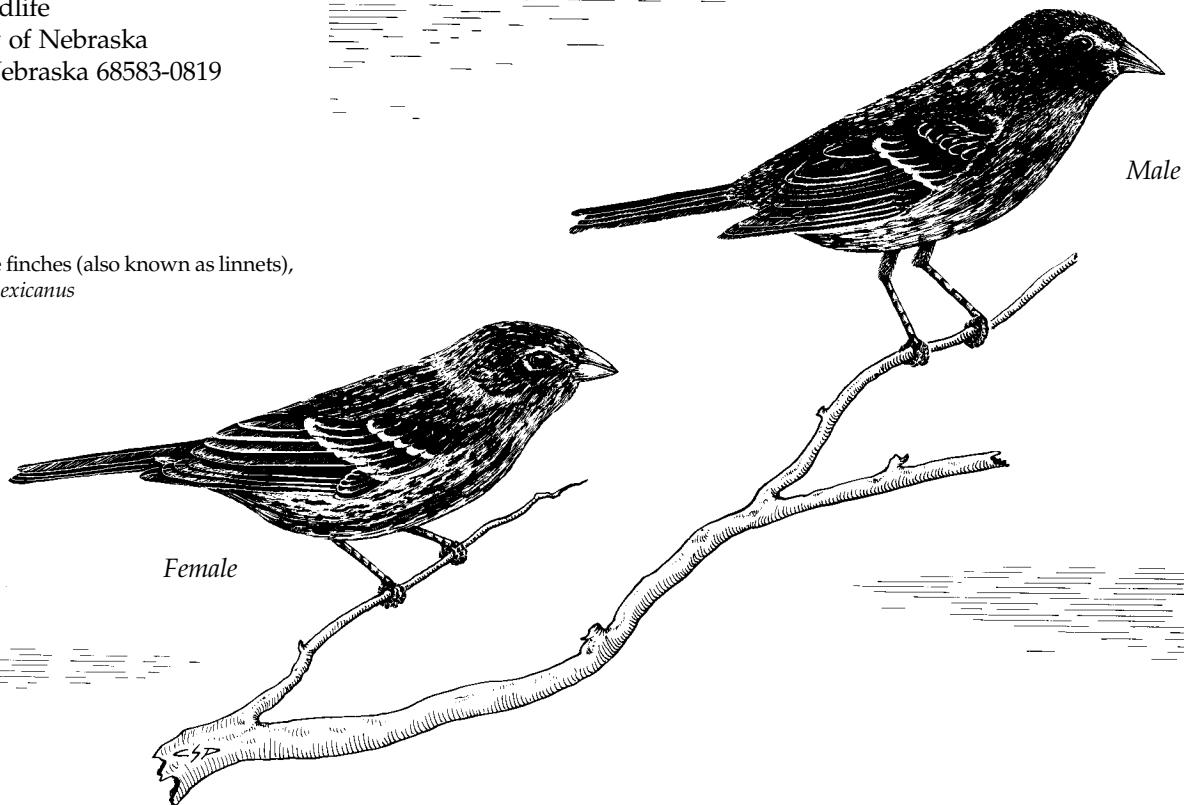


Fig. 1. House finches (also known as linnets),
Carpodacus mexicanus

Damage Prevention and Control Methods

Exclusion

Cover crops with plastic netting.

Habitat Modification

Remove cover used for nesting and resting.

Frightening

Av-Alarms® and gas cannons have been somewhat effective.

Avitrol®

Repellents

Capsicum

Toxicants

None are registered or currently available for use.

Trapping

Modified Australian crow traps, converted cotton trailer trap.

Shooting

Limited effectiveness.

Identification

House finches (*Carpodacus mexicanus*, Fig. 1), also known as linnets, are about the same size as house sparrows. Males are brownish with a bright red breast, forehead, rump, and stripe over the eye. They also have narrow dark stripes on the flanks and belly. Females are sparrowlike, with a plain head, streaked underparts, and no eye stripe. House finches have a warbling song, frequently ending in harsh, nasal notes. Their chirp is similar to that of a house sparrow.



PREVENTION AND CONTROL OF WILDLIFE DAMAGE — 1994

Cooperative Extension Division
Institute of Agriculture and Natural Resources
University of Nebraska - Lincoln

United States Department of Agriculture
Animal and Plant Health Inspection Service
Animal Damage Control

Great Plains Agricultural Council
Wildlife Committee

Range

House finches are abundant residents throughout the western United States and Mexico. They are becoming common in the East and are spreading into the central United States. They are most numerous on the valley floors and in the foothills of California, wherever food and water are available. Though house finches are classified along with other finches as migratory nongame birds under federal law, authorities agree that they are relatively nonmigratory. In late summer they move into the higher mountains and have been observed at elevations as high as 9,800 feet (3,000 m). They are generally resident birds and most of those in valley districts spend their lives within a few miles of the place where they were hatched.

Habitat

The house finch is most abundant in the warm valleys of California near cultivated lands. Human development has created extensive favorable habitat including hedgerows, field edges, and crop fields.

Food Habits

House finches are primarily seed eaters, and before the introduction of cultivated fruits, they probably lived largely on weed seeds. Stomach analyses by Beal in 1910 indicated that weed seeds totaled 86.2% of the diet, fruit 10.5%, animal matter 2.4%, and miscellaneous 0.8%.

General Biology, Reproduction, and Behavior

House finches nest in a great variety of places. There are few areas in which they cannot find suitable nesting sites. In the southern portion of California, nesting begins in March. It extends to July in colder areas. House finches have adapted well to the presence of humans. Females will build nests in almost any sheltered spot, including eaves and building ledges. Any soft

material is used, including fine twigs and grasses. Four to 5 eggs are laid and they hatch in 12 to 16 days. Age at first flight is 11 to 19 days. Two broods are commonly raised, often in the same nest.

During the nesting period, adults are widely scattered. As summer progresses, groups of young birds and a few adults band together to feed in the general area in which they were reared. These bands grow larger as additional broods of young and their parents join them. By mid-August most of the young are out of the nest and have joined neighborhood bands. These flocks move about local areas, following the developmental succession and ripening of fruits and seeds.

During late August and well into late autumn, the range of flock movement increases. By December the birds are generally settled in areas that offer favorable food and roosting shelter. They remain in their winter habitat from December until late February or early March.

Damage and Damage Identification

House finches peck and feed on practically all deciduous fruits, berries, grains, vegetable seed, and flower seed. Damage involves feeding on ripening fruit such as apple, apricot, avocado, blackberry, cherry, fig, grape, nectarine, peach, pear, plum, prune, raspberry, and strawberry; buds of almonds, apricot, nectarine, peach, pear, plum, and prune; seeds of broccoli, lettuce, milo, and sunflower; and miscellaneous vegetable, flower, and tomato plantlets. They also detach the bracts of fruit buds and eat the buds; at blossom time they knock off flower petals and eat the embryonic fruits.

Damage occurs to ripening fruits during three periods:

1. Early season (damage by nesting adults).
2. Mid to late season (damage by young and adult birds resident in the locality).

3. Winter (damage to late ripening fruit by flocks of birds gathering in their winter habitat).

Debudding of fruit trees can occur in October or November but becomes most prevalent in January. A relatively small resident flock of house finches can completely debud considerable acreage because of their long period of activity. This damage is typically caused by resident local birds, wintering birds, or migratory flocks moving from one range to another.

Legal Status

House finches are classified as migratory nongame birds in the Code of Federal Regulations. Depredation permits are required from the US Fish and Wildlife Service before any control activities can be initiated. They may be controlled in California under general supervision of the county agricultural commissioner.

Prevention and Control Methods

Exclusion

Install protective plastic netting (1/2-inch [1.25-cm] mesh) to protect crops such as blueberries, bushberries, and strawberries. Although costly, this approach has been very effective at reducing damage.

Habitat Modification

Remove large brush piles, stacks of irrigation pipe, and piles of boxes to eliminate nesting and resting areas for house finches.

Frightening

Frightening devices in general have little practical value in protecting crops from house finches. Good results have been reported in the use of Av-Alarm® and gas cannons mounted above the crop and moved frequently. Flags, dangling papers, aluminum foil, and scarecrows have little value as methods of crop protection.

Avitrol® Mixed Grain (0.5%) is a toxic chemical that produces flock-alarming reactions in birds that ingest a

sufficient quantity. It is currently registered in California to control house finches in grape vineyards. Six- to 8-foot (1.8- to 2.4-m) V-shaped troughs should be placed 1 to 3 feet (30 to 90 cm) above the vines. Begin prebaiting with untreated bait (one part Dwarf Essex rape seed and three parts canary grass seed) when 50 or more house finches are feeding in the vineyard. Prebait each morning for several days until maximum feeding activity is achieved.

Clean troughs of prebait before exposing Avitrol-treated bait. A ratio of two parts untreated seed to one part treated seed is recommended. The treated bait should be exposed in the troughs for 1 to 4 days. Thereafter, the treated bait should be replaced with clean seed until feeding activity approaches maximum bait acceptance. The prebaiting and baiting with treated grain cycle should be repeated as often as necessary until harvest.

In vineyards, use one trough per acre (2.5/ha). Smaller vineyards usually require more troughs per acre than do larger fields. Bait should be replaced if it becomes water-soaked, or if depleted by birds, insects, or rodents.

Repellents

Granular formulations of capsicum repellents are federally registered for use against house finches and several other birds. Use is limited to certain fruit, vegetable, and grain crops. Read the product label for specific information.

Toxicants

None are registered.

Trapping

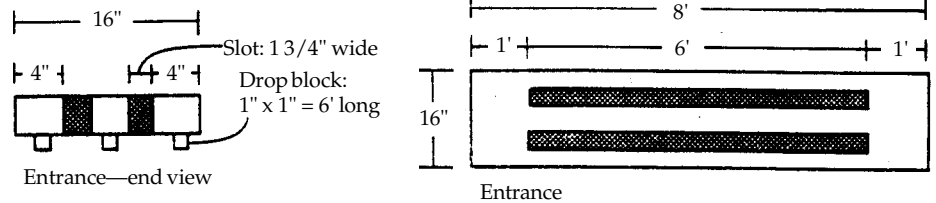
Australian crow traps are used to capture crows, magpies, and ravens. The traps, however, can be modified by changing the entrance, and used to capture house finches, crowned sparrows, house sparrows, starlings, and blackbirds (Fig. 2). Minor modifications can be made to fit the trap on a truck or trailer. The basic design of the trap, however, should not be changed. Cotton trailers can be converted into

traps (Fig. 3) and have been effective in trapping large numbers of house finches. Use small wire mesh, such as 1/2 x 1/2-inch (1.2 x 1.2-cm) mesh hardware cloth or aviary wire to cover traps used for house finches.

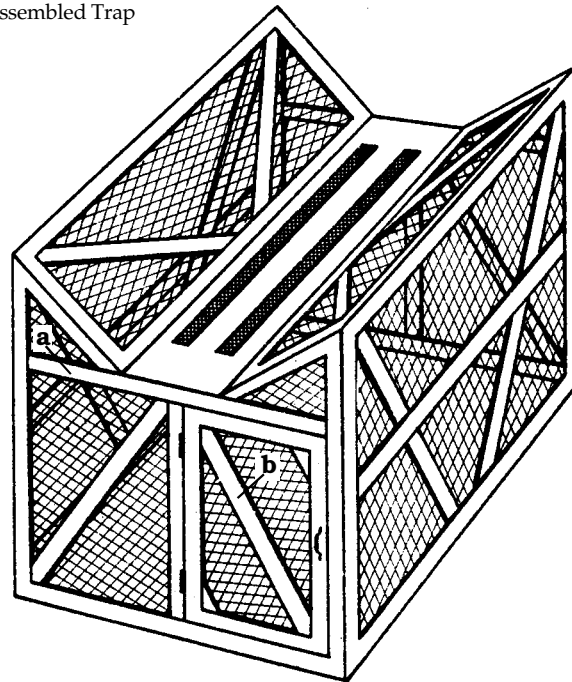
Proper trap location is one of the most important factors in achieving good results. Observe the problem area to determine flyways and resting, perching, and feeding areas before placing traps. Place traps in open areas

where they can be easily seen. Traps have been most effective where birds enter fields and orchards or near resting and perching sites.

Trapped house finches serve as decoys to other birds. Decoy birds are usually essential in attracting other house finches. Use 1 to 15 live decoys, depending on the size of the trap. Provide food and water in flat containers at all times to keep decoy birds alive and to make the trap more attractive



Assembled Trap



Important Assembly Instructions

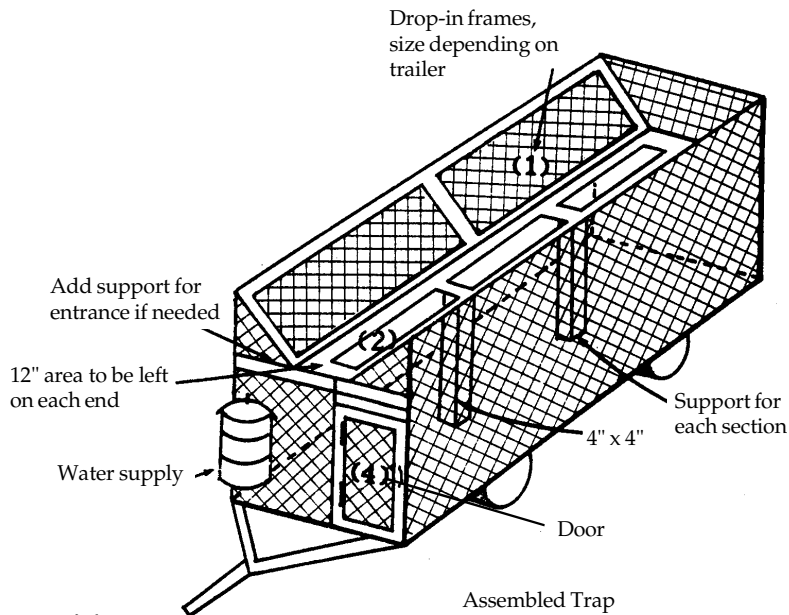
Place end panels between side panels; otherwise, top panels will not fit properly. Note:

- a. Reinforce this area with a 2 x 4 x 16-inch (5 x 10.2 x 40.6-cm) piece of wood. This provides a greater surface area for the entrance to rest on.
- b. Place a small door in this area for removal of trapped birds.

Materials Needed For Trap:

- 15 boards - 1 x 4's, 8 feet long (2.5 x 10.2 cm, 2.4 m long)
- 25 boards - 1 x 4's, 6 feet long (2.5 x 10.2 cm, 1.8 m long)
- 4 boards - 1 x 1's, 8 feet long (2.5 x 2.5 cm, 2.4 m long)
- 1/2-inch exterior plywood - 16 inches x 8 feet (40.1 cm x 2.4 m)
- 1/2-inch mesh aviary wire - 3 x 80 feet (0.9 x 24.4 m)
- 2 hinges
- staples

Fig. 2. Modified Australian crow trap.



Materials:

- 1/2-inch exterior plywood - 16 inches x 8 feet (40.1 cm x 2.4 m)
- 2 boards - 2 x 6's, 7 feet long (5 x 15.2 cm) (supports)
- 2 boards - 2 x 6 x 8 3/4 inches (5 x 15.2 x 22.2 cm) (braces)
- 1/2-inch mesh aviary wire - 3 x 80 feet (0.9 x 24.4 m)

Instructions:

Install the 2 x 6 (5 x 15 cm) supports to prevent warping of plywood. Mount them on outside edge of plywood at (a). Mount the braces at (b). These are needed to support the entrance insert panels. Remove a 12-inch x 6-foot (30.5-cm x 1.8-m) section from the middle of the plywood. Cut 3 1/2 inches (8.9 cm) from one side of the removed section of plywood, making the panel 8 1/2 inches by 6 feet long (21.6 cm x 1.8 m). Insert this panel into the original 12 inch x 6 foot (30.5-cm x 1.8-m) cut. This provides a trap entrance with two, 1 3/4-inch (4.4-cm) slots.

Fig. 3. Converted cotton trailer trap.

to captured birds. Canary grass seed, wild bird seed mix, or chick scratch (cracked corn, milo, and other grains) work well to maintain decoy birds. Install 1/4-inch (0.6-cm) dowel rods to serve as perches, especially in larger traps. Perches should run the full length of the trap, and be located about 1 foot (30 cm) from the sides and halfway between the top and the bottom of the trap. Cold winds or hot sun can stress trapped birds. Fasten burlap to the sunny side of the trap to provide shade in the summer.

Birds can be removed from modified Australian crow traps by catching them with your hand or a small net. Several birds can be removed by cutting a 6 x 6-inch (15 x 15-cm) exit hole that is easily opened and closed in an upper corner of the rear of the trap. Place a small holding cage on the outside of the trap over the open exit hole and herd the birds from the trap into

the holding cage. To euthanize the birds, place the holding cage in a plastic bag and inject carbon dioxide through a hose until the birds are dead. Burn or bury the dead birds.

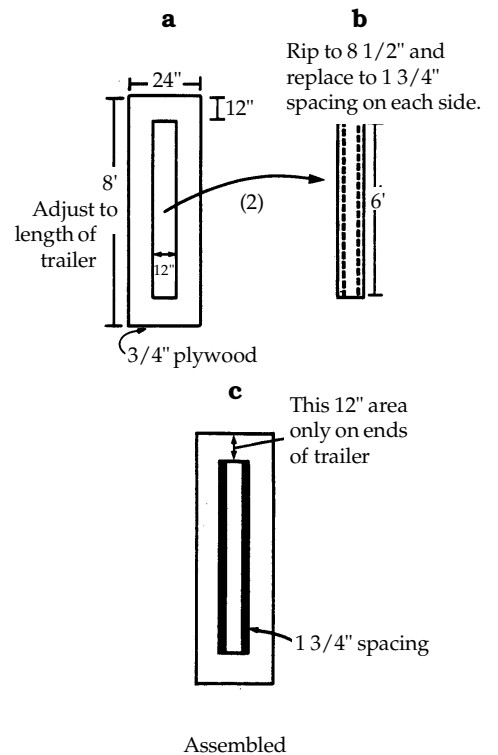
Shooting

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

Acknowledgments

Figures 1, 3, and 4 are reproduced from Clark (1986).

Figure 2 was adapted from Robbins et al (1983) by David Thornhill, University of Nebraska-Lincoln.



For Additional Information

Beal, F. E. L. 1910. Birds of California in relation to the fruit industry. Pages 13-23 in Biol. Survey Bull. No. 30. US Dep. Agric.

Clark, J. P. 1986. Depredating birds. Pages 701-1 - 726-1 in J. P. Clark, ed. Vertebrate pest control handbook. Calif. Dep. Food Agric. Sacramento.

Palmer, T. K. 1970. The house finch and starling in relation to California's agriculture. Pages 265-277 in Proc. of general meeting of the work group on granivorous birds. The Hague, Holland.

Palmer, T. K. 1970. House finch (linnet) control in California. Proc. Vertebr. Pest Conf. 4:173-178.

Peterson, R. T. 1961. A field guide to western birds. Houghton Mifflin Co. Boston. 309 pp.

Robbins, C. S., B. Brun, and H. S. Zim. 1983. Birds of North America. Golden Press. New York. 360 pp.

Editors

- Scott E. Hygnstrom
- Robert M. Timm
- Gary E. Larson