

SELECTED BIBLIOGRAPHY ON THE FOOD HABITS OF NORTH AMERICAN BLACKBIRDS

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ABSTRACT

This bibliography lists 261 references on the food habits of nine North American blackbird species (Icteridae) and on related subjects such as examination techniques, seed dispersal, and sources of bias. The references, which include those published through 1974, are listed alphabetically by author, and brief annotations are given for most of them.

INTRODUCTION

This bibliography was compiled as the basis for a thorough review of the literature, published through 1974, on the food habits of North American blackbirds. Most of the references are briefly annotated; the exceptions are minor articles whose contents are clear from their titles.

References on the following icterid species are included: red-winged blackbird (*Agelaius phoeniceus*), tricolored blackbird (*A. tricolor*), yellow-headed blackbird (*Xanthocephalus xanthocephalus*), brown-headed cowbird (*Molothrus ater*), Brewer's blackbird (*Euphagus cyanocephalus*), rusty blackbird (*E. carolinus*), common (purple, bronzed) grackle (*Quiscalus quiscula*), great-tailed grackle (*Cassidix mexicanus*), and boat-tailed grackle (*C. major*). The bronzed cowbird (*Tangavius aeneus*) is not included because it is primarily a Central American species; "cowbird" in the annotations refers to the brown-headed cowbird only. *Cassidix mexicanus* has only recently been divided into two species, the great-tailed and boat-tailed grackles (32nd Supplement to the AOU Check-List, *Auk* 90(2):411-419). Where possible, the annotations indicate which of these two species were studied; otherwise, they are called "great- and boat-tailed grackles." In annotations, "blackbirds" refers collectively to the icterid species listed above; in some references the authors were not more specific.

The references cited are from a number of sources including, but not limited to, books, periodicals, theses, and various indexes such as *Wildlife Review* (U.S. Fish and Wildlife Service). Theses and unpublished reports with reasonable availability to the interested researcher are included. The references, listed alphabetically by author, have been divided into two groups; those directly related to blackbird food habits and those indirectly related (e.g., techniques of analysis, potential sources of bias, etc.). An asterisk preceding the citation indicates that we have not inspected the article; for these the source from which the reference was obtained is cited. We have carefully read and verified the citations for all other references but, of course, retain responsibility for any errors.

Willis C. Royall, Jr., Robert T. Mitchell, Charles P. Stone, and Ann H. Jones reviewed early drafts and offered many helpful suggestions and additions. Deborah A. Eaton located and reverified several citations and Ruth E. McNeal typed the manuscript.

FOOD HABITS REFERENCES

- Alcock, J. 1972. The feeding response of hand-reared red-winged blackbirds (*Agelaius phoeniceus*) to a stinkbug (*Euschistus conspersus*). *Am. Midl. Nat.* 89(2):307-313.
(Attacked the distasteful insect the first two times it was introduced.)
- Alexander, H. E. 1960. The state game and fish department and bird depredations. *Trans. North Am. Wildl. Nat. Resour. Conf.* 25:111-113.
(Brief mention of blackbird foods as found by other workers.)
- Allen, A. A. 1914a. The red-winged blackbird: A study in the ecology of a cat-tail marsh. *Proc. Linn. Soc. N. Y.* 24-25:43-128.
(Refers to earlier authors for general food habits, but this paper contains one of the earliest comprehensive listings of insect taxa used as food by the redwing. The redwing is not restricted to marsh habitat as a food source.)
- Allen, A. A. 1914b. Birds in their relation to agriculture in New York State. *Cornell Reading-Courses* 4(76):18-56.
(Cites redwing as feeding on locusts, cutworms, armyworms, and weed seeds.)
- Anonymous. 1962. Crop pests included in blackbirds' regular diet. *Crops Soils* 14(9):32.
(Stomachs of 500 blackbirds—mostly redwings—collected in Canada during the spring months contained many insects considered agricultural pests.)
- Audubon, J. J. 1831. *Ornithological biography*. Vol. 5. Adam and Charles Black, Edinburgh, 664 pp.
(One of the earliest works to mention food items found in blackbird stomachs. Covers all blackbird species and refers to letters from early naturalists about observations of feeding.)
- Bailey, V. 1905. Birds known to eat the boll weevil. *U.S. Dep. Agric. Biol. Surv. Bull.* 22. 16 pp.
(Redwings and cowbirds were among several bird species eating weevils.)
- Baird, J., and A. J. Meyerriecks. 1965. Birds feeding on an ant mating swarm. *Wilson Bull.* 77(1):89-91.
(Redwings and common grackles were among 13 bird species eating flying ants in Massachusetts.)
- Baird, S. F., T. M. Brewer, and R. Ridgeway. 1874. *A history of North American birds*. Vol. 2. Little, Brown, and Co., Boston. 590 pp.
(This early work includes a general discussion on the food of each blackbird species as known at that time.)
- Baker, W. A., W. G. Bradley, and C. A. Clark. 1949. Biological control of the European corn borer in the United States. *U.S. Dep. Agric. Tech. Bull.* 983. 185 pp.
(Redwings, common grackles, and rusty blackbirds were observed feeding on this insect pest.)
- Bartlett, L. M. 1956. Observations on birds "hawking" insects. *Auk* 73(1):127-128.
(Common grackles were observed flycatching insects.)
- Beal, F.E.L. 1895. The crow blackbirds and their food. Pages 233-248 in *Yearbook of Agriculture, 1894*. U.S. Department of Agriculture, Washington, D.C.
(Food of common grackles was about 50% animal and 50% vegetable.)

- Beal, F.E.L. 1897. Some common birds in their relation to agriculture. U.S. Dep. Agric. Farmers' Bull. 54. 40 pp.
(Food of redwings and common grackles.)
- Beal, F.E.L. 1898. Birds that injure grain. Pages 345-354 in Yearbook of Agriculture, 1897. U.S. Department of Agriculture, Washington, D.C.
(Discusses foods of the redwing and other icterids, but is essentially a preliminary report of the next reference.)
- Beal, F.E.L. 1900. Food of the bobolink, blackbirds, and grackles. U.S. Dep. Agric. Biol. Surv. Bull. 13. 77 pp.
(The first major work on the food habits of blackbirds. Covers all species except the tricolor. Used the estimated percent volume method of analysis, which allows comparison with many later papers.)
- Beal, F.E.L. 1905. The relation of birds to fruit growing in California. Pages 241-253 in Yearbook of Agriculture, 1904. U.S. Department of Agriculture, Washington, D.C.
(Brewer's blackbirds ate cherries and insects in cherry orchards.)
- Beal, F.E.L. 1909. The relations between birds and insects. Pages 343-350 in Yearbook of Agriculture, 1908. U.S. Department of Agriculture, Washington, D.C.
(Birds are beneficial because they consume large numbers of insects. Scattered references to insect consumption by blackbirds.)
- Beal, F.E.L. 1910. Birds of California in relation to the fruit industry. Part II. U.S. Dep. Agric. Biol. Surv. Bull. 34. 94 pp.
(Economic relations between birds and agriculture. Includes the bicolored redwing and Brewer's blackbirds.)
- Beal, F.E.L. 1915. Some common birds useful to the farmer. U.S. Dep. Agric. Farmers' Bull. 630. 29 pp.
(Mentions foods of the common grackle, redwing, and Brewer's.)
- Beal, F.E.L. 1948. Some common birds useful to the farmer. U.S. Fish Wildl. Serv. Conserv. Bull. 18. 28 pp.
(An updated revision of Beal 1915.)
- Beall, G. H. 1967. The blackbird menace. Rice J., May:26-27.
(Depredations by blackbirds on rice.)
- Beasley, L. E., and S. W. Carothers. 1974. Unusual feeding habits in two species of blackbirds. Wilson Bull. 86(4):478-479.
(Redwings and Brewer's ate young leopard frogs and subadult voles.)
- Beecher, W. J. 1950. Convergent evolution in the American orioles. Wilson Bull. 62(2):51-86.
(Discusses evolutionary adaptations of the bill and jaw musculature of icterids in relations to their food habits.)
- Beecher, W. J. 1951. Adaptations for food-getting in the American blackbirds. Auk 68(4):411-440.
(The relationship of the food habits of icterids to their bill shape and other cephalic adaptations. Includes summary of the food habits work of other authors.)

- Beeton, A. M., and L. Wells. 1957. A bronzed grackle (*Quiscalus quiscula*) feeding on live minnows. *Auk* 74(2):263-264.
- Bent, A. C. 1958. Life histories of North American blackbirds, orioles, tanagers, and allies. U.S. Natl. Mus. Bull. 211. 549 pp. (Reprinted by Dover Publications, Inc., New York, 1965.) (Summarizes the foods of all North American blackbird species. Relies primarily on the available literature.)
- Besser, J. F., J. W. De Grazio, and J. L. Guarino. 1968. Costs of wintering starlings and red-winged blackbirds at feedlots. *J. Wildl. Manage.* 32(1):179-180. (Cost of cattle rations eaten by each species at feedlots.)
- Bird, R. D. 1961. Ecology of the aspen parkland of western Canada in relation to land use. *Can. Dep. Agric. Res. Branch Publ.* 1066. 155 pp. (Food of the redwing in the Canadian parkland.)
- Bird, R. D., L. B. Smith. 1964. The food habits of the red-winged blackbird, *Agelaius phoeniceus*, in Manitoba. *Can. Field Nat.* 78(3):179-186. (Demonstrates a negative correlation between insects and grit.)
- Blankinship, D. R. 1966. The relationship of white-winged dove production to control of great-tailed grackles in the lower Rio Grande Valley of Texas. *Trans. North Am. Wildl. Nat. Resour. Conf.* 31:45-58. (Great-tailed grackles eat large numbers of white-winged dove eggs and nestlings.)
- Brenner, F. J. 1966. Energy and nutrient requirements of the red-winged blackbird. *Wilson Bull.* 78(1):111-120. (Existence energy requirements of redwings.)
- Brenner, F. J. 1967. Seasonal correlations of reserve energy of the red-winged blackbird. *Bird-Banding* 38(3):195-211.
- Brenner, F. J. 1968. Energy flow in two breeding populations of red-winged blackbirds. *Am. Midl. Nat.* 79(2):289-310. (Energy requirements of nestlings and breeding adults.)
- Brenner, F. J., and W. F. Malin. 1965. Metabolism and survival time of the red-winged blackbird. *Wilson Bull.* 77(3):282-289. (Metabolic rates and reserve energy supplies in redwings.)
- Bruner, L. 1896. Some notes on Nebraska birds. Pages 48-178 in Report of the Nebraska State Horticultural Society (Lincoln, Nebr.) for the year 1896. (Stresses benefits of insect-eating habits of redwings. Also discusses foods of cowbirds and common grackles.)
- Bryant, H. C. 1911. The relation of birds to an insect outbreak in northern California during the spring and summer of 1911. *Condor* 13(4):195-208. (Brewer's blackbirds were the most important predator species during an insect outbreak. Believed that birds were an important natural check during this outbreak.)
- Bryant, H. C. 1912. Birds in relation to a grasshopper outbreak in California. *Univ. Calif. Publ. Zool.* 11(1):1-20. (Established that a bird will feed on the insect group most available. Calculated that a 200-bird flock of redwings ate enough grasshoppers to save the alfalfa farmer at least \$20 per year in insect damage.)

- Burleigh, T. D. 1938. The relation of birds to the establishment of longleaf pine seedlings in southern Mississippi. U.S. For. Serv. South. For. Exp. Stn. Occas. Pap. 75. 5 pp.
(Red-winged blackbird depredations.)
- Burrill, A. C. 1913. Economic and biologic notes on the giant midge: *Chironomus (Tendipes) plumosus* Meigen. Bull. Wis. Nat. Hist. Soc. 10(3-4):124-163.
(Redwings mentioned as a predator of this insect.)
- Cade, T. J. 1953. Aerial feeding of the rusty blackbird on mosquitoes. Wilson Bull. 65(1):52-53.
- Campbell, R. W. 1974. Rusty blackbirds prey on sparrows. Wilson Bull. 86(3):291-293.
(Attacked tree sparrows, white-crowned sparrows, and possibly a lapland longspur.)
- Cardinell, H. A., and D. W. Hayne. 1944. Damage to corn by red-wings. Mich. Agric. Exp. Stn. Q. Bull. 27(1):26-34.
(Food, feeding behavior, and depredations in the cornfields of Michigan.)
- Cardinell, H. A., and D. W. Hayne. 1945. Corn injury by red-wings in Michigan. Mich. Agric. Exp. Stn. Tech. Bull. 198. 59 pp.
- Christofferson, K. 1927. The bronzed grackle as a bird of prey. Bird-Lore 29(2):119.
(Common grackles killed two pine siskins and a barn swallow. They consumed part of the pine siskins.)
- Clark, G. A., Jr. 1971. The occurrence of bill-sweeping in the terrestrial foraging of birds. Wilson Bull. 83(1):66-73.
(Common grackles swept their bills through litter to uncover food items.)
- Collier, G. 1968. Annual cycle and behavioral relationships in the red-winged and tricolored blackbirds of southern California. Ph.D. Thesis. Univ. Calif., Los Angeles. 374 pp.
(The rate at which food was brought to nestlings of both species is recorded and discussed.)
- Coppinger, L. L. 1967. The role of the avian visual system in crop depredation, with special reference to the redwinged blackbird. M.S. Thesis. Univ. Mass., Amherst. 121 pp.
(Reviews much of the literature on the food habits of red-wings.)
- Cottam, C. 1943. Unusual feeding habit of grackles and crows. Auk 60(4):594-595.
(Common grackles fed on small fish like gulls and terns.)
- Cottam, C., and F. M. Uhler. 1942. Birds as a factor in controlling insect depredations. U.S. Fish Wildl. Serv. Wildl. Leafl. 224. 6 pp.
(Stresses that redwings eat many insect pests.)
- Cottam, C., and J. B. Trefethen. 1968. Whitewings. Van Nostrand Co., Inc., Princeton, N.J. 384 pp.
(Great-tailed grackles ate eggs and young of other grackles, mockingbirds, and white-winged, mourning, and Mexican ground doves.)
- Cowan, I. M. 1942. Termite-eating by birds in British Columbia. Auk 59(3):451.
(Brewer's blackbird was one of several species eating termites.)

- Crase, F. T., and R. W. DeHaven. 1973. Blackbird damage appraisal for rice in the Sacramento Valley, California—1972 studies. U.S. Fish Wildl. Serv., Denver Wildl. Res. Cent. unpub. rep. dated January 15, 1973. 21 pp. Mimeographed.
(Annual foods of redwings, tricolors, Brewer's, yellowheads, and cowbirds were largely rice, wildmillet, and insects.)
- Crebbs, T. C., Jr. 1960. Blackbird ecology and their relationship to agriculture in southeastern Virginia. M.S. Thesis. Va. Polytech. Inst., Blacksburg. 101 pp.
(Most common grackles shot in peanut fields had eaten peanuts. Some data on foods of redwings, starlings, and cowbirds also collected from peanut fields.)
- Criddle, N. 1920. Birds in relation to insect control. *Can. Field Nat.* 34(8):151-153.
(Crows, gulls, black terns, grouse, and blackbirds ate large numbers of grasshoppers.)
- Cypert, E., and B. S. Webster. 1948. Yield and use by wildlife of acorns of water and willow oaks. *J. Wildl. Manage.* 12(3):227-231.
(Common grackles were among several species that collectively took 2% of the acorn crop from plots on the White River National Wildlife Refuge, Arkansas.)
- Darden, T. 1974. Common grackles preying on fish. *Wilson Bull.* 86(1):85-86.
- Dater, E. E. 1961. Acorn crop collapses. *East. Bird Banding Assoc. News* 24(5):151.
(Common grackles depend on pin-oak for a large portion of their winter food.)
- Davis, J. 1954. Seasonal changes in bill length of certain passerine birds. *Condor* 56(3):142-149.
(Seasonal changes of bill length in redwings, tricolors, and Brewer's were correlated to the amount of insects consumed each season.)
- Davis, M. 1944. Purple grackle kills English sparrow. *Auk* 61(1):139-140.
(The common grackle killed the sparrow and ate part of it.)
- Davis, W. B. 1933. The span of the nesting season of birds in Butte County, California, in relation to their food. *Condor* 35(4):151-154.
(Demonstrates a positive correlation between time of nesting and general food habits. Redwings, tricolors, cowbirds, and Brewer's blackbirds were some of the bird species studied.)
- Davis, W. R., II, and K. A. Arnold. 1972. Food habits of the great-tailed grackle in Brazos County, Texas. *Condor* 74(4):439-446.
(The food of 129 great-tailed grackles was 80% animal matter, largely orthopterans. Insects were eaten most during the warm season. Nestlings were fed insects and grit.)
- Davison, V. E. 1961. Food competition between game and non-game birds. *Trans. North Am. Wildl. Nat. Resour. Conf.* 26:239-245.
(Fifteen species of non-game birds, including redwings, cowbirds, and common grackles, feed on crops and non-agricultural foods in the Southeast in winter; 46 foods are discussed.)
- Dawson, W. L. 1923. *Birds of California*. Vol. 1. S. Moulton Co., San Francisco. 671 pp.
(Estimated that each redwing eats enough insects to be worth \$1 per year to the alfalfa crop.)
- De Grazio, J. W., J. F. Besser, T. J. DeCino, J. L. Guarino, and R. I. Starr. 1971. Use of 4-aminopyridine to protect ripening corn from blackbirds. *J. Wildl. Manage.* 35(3):565-569.
(Redwings destroyed 3 bushels of field corn per acre in untreated South Dakota fields.)

- Dennis, J. V. 1949. Grackle competition for dogwood fruit. *Auk* 66(2):208.
(In one-half hour, a flock of common grackles stripped the berries from 20 dogwood trees.)
- Denton, J. F. 1947. Redwings feeding on seeds of long-leafed pine. *Oriole* 12(1):10.
- Dyer, M. I. 1967. An analysis of blackbird flock feeding behavior. *Can. J. Zool.* 45(5):765-772.
(Feeding behavior of redwings and factors affecting feeding patterns.)
- Emlen, J. T., Jr. 1937. Bird damage to almonds in California. *Condor* 39(5):192-197.
(Redwings, tricolors, and Brewer's did not cause significant amounts of damage.)
- Ernst, S. G. 1944. Observation on the food of the bronzed grackle. *Auk* 61(4):644-645.
(Common grackles ate leopard frogs in New York.)
- Fankhauser, D. 1962. Observations of birds feeding on overwintering corn borer. *Wilson Bull.* 74(2):191.
(Redwings did not feed heavily on corn borers in cornstalks.)
- Fautin, R. W. 1941. Development of nestling yellow-headed blackbirds. *Auk* 58(2):215-232.
(Food brought to nestlings was almost entirely insect.)
- Fischer, R. B. 1953. Winter feeding of the redwing (*Agelaius phoeniceus*). *Auk* 70(4):496-497.
(Redwings ate moth larvae from ragweed stems.)
- Fleetwood, R. J. 1947. Redwings feeding on seeds of loblolly and slash pine. *Oriole* 12(3):39-40.
- Follett, W. I. 1957. Bronzed grackles feeding on emerald shiners. *Auk* 74(2):263.
- Forbes, S. A. 1907. On the life history, habits, and economic relations of the white-grubs and may-beetles. *Ill. Agric. Exp. Stn. Bull.* 116. pp. 447-480.
(Crows and blackbirds are principal enemies of these insects.)
- Foster, F. B. 1927. Grackles killing young pheasants. *Auk* 44(1):106.
(Common grackles killed and ate pheasant chicks.)
- Friedmann, H. 1929. The cowbirds. Charles C. Thomas, Pub., Baltimore, 421 pp.
(Food of the brown-headed cowbird is discussed along with many other life history and behavioral aspects.)
- Gabrielson, I. N. 1914. Ten days' bird study in a Nebraska swamp. *Wilson Bull.* 26(2):51-68.
(Food of nestling yellowheads and redwings.)
- Gabrielson, I. N. 1915. Notes on the red-winged blackbird. *Wilson Bull.* 27(2):293-302.
(Food of nestling redwings in Iowa.)
- Gabrielson, I. N. 1922. Short notes on the life histories of various species of birds. *Wilson Bull.* 34(4):193-210
(Food of nestling common grackles was largely earthworms.)
- Gilfillan, M. C. 1963. Modern control of bird damage. *Ohio Conserv. Bull.*, July:24-27
(Mentions blackbird damage to grain.)

- Gillette, C. P. 1905a. The western cricket. Colo. Agric. Exp. Stn. Bull. 101. 16 pp.
(Bears and coyotes feed upon this pest but birds destroy them in greatest numbers; hawks, sage grouse, and blackbirds noted.)
- Gillette, C.P. 1905b. The beet web-worm. Pages 3-12 in *Beet worms and their remedies*. Colo. Agric. Exp. Stn. Bull. 98.
(Large flocks of blackbirds devoured these in large quantities.)
- Giltz, M. L., and T. M. Stockdale. 1960. The red-winged blackbird story. Ohio Agric. Exp. Stn. Spec. Circ. 95. 19 pp.
(Annual redwing foods in Ohio were 69% vegetable and 31% animal.)
- Goddard, S. V. 1969. Fall and winter food habits of red-winged blackbirds and brown-headed cowbirds in western Oklahoma. *Wilson Bull.* 81(3):336-337.
(Grain sorghum, ragweed seeds, and insects were the most frequently eaten items for both species.)
- Goss, N. S. 1891. History of the birds of Kansas. G. W. Grane & Co., Topeka. 692 pp.
(An early natural history report; some comments on the foods of most blackbird species.)
- Gowanlock, J. N. 1914. The grackle as a nest-robber. *Bird-Lore* 16(3):187-188.
(Common grackle predation on the eggs and young of house sparrows.)
- Graham, E. H. 1941. Legumes for erosion control and wildlife. U.S. Dep. Agric. Misc. Publ. 412. 153 pp.
(Lists the legume species used as food by different birds, including most blackbird species.)
- Grinnell, J. 1932. Notes of some birds observed in the vicinity of Colusa, California. *Condor* 25(5):172-176.
(Mentions the redwing's rice-eating habits.)
- Hamilton, W. J., Jr. 1951. The food of nestling bronzed grackles, *Quiscalus quiscula versicolor*, in central New York. *Auk* 68(2):213-217.
(Lists the food items of 130 nestlings.)
- Hardy, J. W. 1961. Resident and migrant blackbirds in southeastern Virginia: Agricultural depredations and winter roost locations. M.S. Thesis. Va. Polytech. Inst., Blacksburg. 74 pp.
(Blackbirds damaged corn, peanuts, and milo.)
- Hayne, D. W. 1946. The relation between number of ears opened and the amount of grain taken by redwings in corn fields. *J. Agric. Res.* 72(8):289-295.
(Also feeding behavior in cornfields.)
- Helms, C. W. 1962. Red-winged blackbird killing sharp-tailed sparrow. *Wilson Bull.* 74(1):89-90.
(Apparently tried to eat it.)
- Henderson, J. 1927. The practical value of birds. Macmillan Co., New York. 342 pp.
(Summarizes and discusses many studies relating to the beneficial aspects of birds, including blackbirds.)
- Henshaw, H. W. 1907. Birds useful in the war against the cotton boll weevil. U.S. Dep. Agric. Circ. 57. 4 pp.
(Blackbirds help the farmer by eating weevils.)

- Henshaw, H. W. 1908. Does it pay the farmer to protect birds? Pages 165-178 in Yearbook of Agriculture, 1907. U.S. Department of Agriculture, Washington, D.C.
(Blackbirds eat insects as well as grain.)
- Hintz, J. V., and M. I. Dyer. 1970. Daily rhythm and seasonal change in the summer diet of adult red-winged blackbirds. *J. Wildl. Manage.* 34(4):789-799.
(Caloric intake is higher in the morning than after noon, less in June than in September.)
- Hodges, J. 1951. Land birds feeding on crayfish. *Auk* 68(4):526-527.
(Common grackle was observed eating a crayfish in Iowa.)
- Horn, H. S. 1968. The adaptive significance of colonial nesting in the Brewer's blackbird (*Euphagus cyanocephalus*). *Ecology* 49(4):682-694.
(Colonial nesting adaptive to variable food supply.)
- Howard, W. E., M. W. Cummings, and A. Zajanc. 1961. Comments on bird problems in California. *Calif. Vector News* 8(3):13-17.
(Mentions redwing depredations on rice.)
- Howard, W. J. 1937. Bird behavior as a result of emergence of seventeen year locusts. *Wilson Bull.* 49(1):43-44.
(Common grackles and cowbirds fed on locusts.)
- Howell, A. B. 1922. Redwings of the Imperial Valley, California. *Condor* 24(2):60-61.
(Discusses beneficial as well as harmful aspects of redwing food habits.)
- Howell, A. H. 1906. Birds that eat the cotton boll weevil, a report of progress. U.S. Dep. Agric. Biol. Surv. Bull. 25. 22 pp.
(Blackbirds, especially Brewer's, eat weevils during the winter months when this is the most beneficial.)
- Howell, A. H. 1907. The relation of birds to the cotton boll weevil. U.S. Dep. Agric. Biol. Surv. Bull. 29. 31 pp.
(Redwings, cowbirds, Brewer's, common grackles, and great- and boat-tailed grackles ate boll weevils.)
- Howell, A. H. 1908. Destruction of the cotton boll weevil by birds in winter. U.S. Dep. Agric. Circ. 64. 5 pp.
(Redwings, Brewer's, and rusty blackbirds were important bird species eating boll weevils during the winter months.)
- Howell, A. H. 1911. Birds of Arkansas. U.S. Dep. Agric. Biol. Surv. Bull. 38. 100 pp.
(Food of yellowheads, redwings, Brewer's, cowbirds, and rusty blackbirds in Arkansas.)
- Judd, S. D. 1899. Birds as weed destroyers. Pages 221-232 in Yearbook of Agriculture, 1898. U.S. Department of Agriculture, Washington, D.C.
(Blackbirds eat weed seeds, as well as grain, and thereby benefit the farmer.)
- Judd, S. D. 1901. The food of nestling birds. Pages 411-436 in Yearbook of Agriculture, 1900. U.S. Department of Agriculture, Washington, D.C.
(Economic benefit of insects brought to nestlings, including nestling blackbirds.)
- Judd, S. D. 1902. Birds of a Maryland farm. U.S. Dep. Agric. Biol. Surv. Bull. 17. 116 pp.
(Foods of redwings, common grackles, cowbirds, and rusty blackbirds in Maryland.)

- Kalmbach, E. R. 1914. Birds in relation to the alfalfa weevil. U.S. Dep. Agric. Bull. 107. 64 pp.
(Redwings, cowbirds, yellowheads, and Brewer's blackbirds ate large numbers of this weevil in an infested area in Utah during spring.)
- Kalmbach, E. R. 1937. Blackbirds and the rice crop on the gulf coast. U.S. Dep. Agric. Wildl. Res. Manage. Leaflet. BS-96. 4 pp.
(Rice depredations in Louisiana.)
- Kalmbach, E. R. 1942. Blackbirds and grain crops in the eastern United States. U.S. Fish Wildl. Serv. Wildl. Leaflet. 220. 5 pp.
(Discusses grain depredations by blackbirds.)
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