

Birds of Prey That Help the Farmer

By Edward B. Clark

Most hawks and owls are beneficial. Uncle Sam wants to protect them—why not assist him in his good work?

AMLET said that he knew a hawk from a handsaw. Perhaps it is better to know one hawk from another. Counter to the general belief, most of our North American hawks are beneficial in their lives. In the course of a year they do much more good than harm, and yet they are shot ruthlessly on sight. It would profit the man with a poultry yard and a farm to study the habits of hawks a little and to learn to discriminate between the friend and the foe to his interests.

Let us take first the hawks ordinarily known as hen hawks or chicken hawks. The hawks commonly called by these names rarely kill any chickens. But the trouble is that they get the blame for the bad deeds of birds that "sneak in" to the poultry yard, do their killing and make their escape while the big bird soaring in plain sight against the heavens is charged with being the culprit and receives the present of a charge of shot if opportunity offers.

Take the red-tailed hawk for instance. He is known to the scientist as *Buteo borealis*. In the West the soaring "chicken hawk" almost invariably is the redtail. About once a year perhaps the redtail will pick up a chicken, but for the rest of the time he contents himself with a diet of frogs, snakes, crawfish, insects, and small mammals, mostly of an injurious habit of life. The number of field mice that a red-tailed hawk in the course of a month will catch and devour is almost incredible.

The good that this "chicken hawk" does so far outweighs the harm that it is a living shame it is hunted so senselessly. If there ever was a creature in the world about whom there are a thousand mistaken thoughts that creature is the red-tailed hawk, the commonest of our "chicken hawks."

Ordinarily one thinks of birds of prey as being exceedingly bold. Some of them are. But the redtail is on pretty nearly every occasion an ardent coward. He is meekly submissive to the assaults of the kingbird, and he is a perfect potpourri in the face of an attack from a crow. I have seen a crow buffet a red-tailed hawk for half an hour, the hawk making absolutely no attempt to defend himself and apparently being afraid to leave its perch on a fencepost for fear that the crow would get a greater advantage while in flight. As a rule the courageous hawks are the injurious hawks.

There is another hawk similar in its habits to the redtail. It is fairly common in many parts of the United States and particularly so east of the Mississippi river. It is called the red-shouldered hawk, and with the redtail it shares the ignominy of being known wherever it appears as a chicken hawk. Like the redtail it occasionally kills a chicken. But it dearly loves rats, mice, tree-shrilling rabbits, frogs, and insects. The red-shouldered hawk soars, and soars, and soars, and when it is seen against the sky the shotgun is brought out and an attempt is made to kill the friend that is looking for field mice, gophers or something else, and with its thoughts far removed from the chicken coop.

In a suburb of Washington, D. C., a friend of mine has a country place where he raises large numbers of chickens. This friend is a bird lover and he has many species of American birds dwelling at his doorstep. Back of his house he has about twenty acres of woodland, and in these woods lived two pairs of red-shouldered hawks.

My friend asked me if he should kill the hawks in order to save his chickens. I told him to leave the hawks alone and he did so for a long time. Finally on one unfortunate day one of the red-shouldered gentlemen descended on the poultry yard and made off with a pullet. Death was decreed for the hawks and soon they were killed.

Within a few weeks the chickens began to disappear, or, at any rate, were found dead with their lifeblood gone, and in some cases partly devoured. The weasels were at work. After the hawks were killed the weasels multiplied in great numbers and took their heavy toll of roosters, hens and little chicks of uncertain sex. My friend was sorry that he had killed the hawks.

Then there is the sparrow hawk, known to the scientist as *Falco sparverius*. This is the smallest of the hawks of North America, and it has a range all over the United States. The sparrow hawk almost unquestionably is the most beautiful, as it is the smallest, of our birds of prey. This little hawk is unfortunately named. It was dubbed sparrow hawk long before the day of the English sparrows in this country. It was so called because it occasionally captured and killed some of our native American sparrows, which, for the most part, are beneficial birds. Lately the sparrow hawk when it does any bird killing at all, turns its attention largely to English sparrows, and thereby adds to the services which it otherwise renders. The sparrow hawk lives mostly on small injurious mammals, insects, grasshoppers, caterpillars, and the like. It should be said, however, that fully 25 per cent of the food of the sparrow hawk consists of field mice, house mice and shrews.

A pair of sparrow hawks have a nest, or at any rate a resting place, back of a big bronze eagle which spreads its wings near the roof on the face of the state, war, and navy building in Washington directly across a narrow street from one end of the White House. These two sparrow hawks hunt the White House grounds daily. It may not be the same pair, but two sparrow hawks have been abiding back of the state department eagle for a good many years.

When Theodore Roosevelt was president he searched the grounds around the White House every once in a while to discover what he could in the way of wild life. Next to birds, he was particularly interested in field mice. Occasionally he la-



MARSH HAWK



RED TAILED HAWKS

mented the fact that he could not find more species of the little mammals than he did in the White House yard. I always have thought that the reason was to be found back of the eagle on the state department front. The two sparrow hawks kept the lawns pretty well clear of the minor rodents.

The marsh hawk, *Circus hudsonius*, is one of the most beautiful birds of prey in the United States and one of the most useful. The adult male has a bluish slate body, streaked with white, and becoming pure white just above the tail and underneath. The underparts are lightly speckled with reddish brown. The adult female and the young are rusty in color, with a good many streaks.

Marsh hawks, as their name suggests, haunt the wet places, but frequently they are seen flying low over the dry fields and the prairies. Perhaps one cannot do better than to quote Vernon Bailey on the subject of the marsh hawk. He writes:

"The intelligent farmer usually recognizes the value of this hawk and the fact that it almost never touches his poultry. He sees it skimming over his meadows and diving into the grass for mice, and wisely lets it live; but nevertheless he would be surprised if he could figure out how many dollars it saves him during the year."

It is virtually impossible within the scope of a comparatively short article to give anything like a full list with descriptions of all the beneficial hawks in the United States. They form a feathered legion. Let us, however, take one or more of these birds of prey for a little advisory discourse. The Swainson hawk, *Buteo swainsoni*, is distributed from the far arctic regions southward to the Argentine Republic. In the United States, it is fairly common from the western ocean to Wisconsin and Illinois, and occasionally it is found in the East.

Major Bendire, the army ornithologist, wrote of this hawk, which he studied for a long time:

"The food of Swainson's hawk consists almost entirely of the smaller rodents, principally striped gophers and mice, as well as grasshoppers and the large black cricket which is very common, as well as destructive, in certain seasons, and the base of the farmers in eastern Oregon, Washington, Idaho, Nevada, and other localities in the Great Basin, destroying and eating up every green thing as they move along. I cannot recall a single instance where one of these birds visited a poultry yard. From an economic point of view I consider it by far the most useful and beneficial of all our hawks."

Now for something about a few of our beneficial owls. Everybody knows, or ought to know, the little screech owl which sits at the entrance to its hole in a hollow tree and utters its querulous, curious cry. This little bird has two upstanding



BARRED OWL



BARN OWL

tufts of feathers which serve to distinguish it from a less common but very much similar owl of which something will be written further on. Of owls which are not described here at length, among the most useful are the barred owl, the long-eared and the short-eared owls.

The screech owl is one of the best mousers in the world. It also is a great destroyer of insects. It starts its hunting about sunset and it journeys round and round the buildings in the country looking for its favorite quarry. It kills thousands upon thousands of mice every year. Dr. A. K. Fisher, the government's expert in all matters pertaining to hawks and owls, says of the little screech owl that their economic relations are of the greatest importance, "particularly on account of the abundance of the species in farming districts; and whoever destroys them through ignorance or prejudice should be severely condemned."

It was the barn owl, or a species closely allied to it, of which Gray wrote in his "Elegy," "the moping owl doth to the moon complain." Sometimes the barn owl is called the monkey-faced owl because its countenance does look a trifle like that of the monkey. In recent years the barn owls have been decreasing in numbers because of the mistaken belief that they kill poultry. The trouble is that barn owls frequently live in barns or in other structures reared by man, and because they are seen therefore about the poultry yards frequently the impression is given that they are chicken thieves. The barn owl, however, is one of the most beneficial of all our rapacious birds. It dearly loves rats and mice, and one barn owl is worth a dozen cats as a ratter and mouser.

There is a little owl commonly called the "saw-whet," which is an interesting and beneficial creature. At first glance one might think that the saw-whet owl is a screech owl, but on taking a second look it will be seen that the saw-whet lacks the ear tufts or feathered horns that are worn by its little cousin.

The saw-whet owl gets its name from the fact that its note sounds like the whetting of a saw. It can be readily understood, therefore, that this bird is not much of a musician. It is a great mouser, and like most of the other owls, seems to prefer these small rodents to almost any other article of diet.

The saw-whet owl raises a large family each year. It keeps the father and mother exceedingly busy to get enough mice to feed the offspring, but they keep at the hunting work for hours at a time and probably deny themselves many a mouse morsel in order that the young may get enough to eat.

It is an easy matter for a person to get from the government full knowledge of the habits of the beneficial hawks and owls of the United States. The biological survey of the department of agriculture has the records in the case, and it will be glad enough to furnish information to persons seeking it. Uncle Sam wants to save most of his hawks and owls.

Why not help him do it?

RULES EASILY UNDERSTOOD.

The "Little Citizens" committee of the Bella Vista playground in Oakland, Cal., asked to draw up rules and regulations on conduct of the grounds, submitted the following series:

"No cigarettes. They're no good. Any boy found smoking will be shown the gate."

"You've got to keep paper and trash off the grounds. If you eat here, do it decent and take the refuse away with you. If you don't, look out for trouble."

"Small children must be given a chance all the time. If any boy takes anything away from a little kid, he'll get his."

"Say 'thanks.' It don't hurt you, and being polite ain't a crime."—From the Playground.

TRAVEL MADE SAFE.

The terrors of the desert will have no fears for the transcontinental tourist making the trip by auto over the Lincoln highway. It is planned to run a double copper telephone wire along the Lincoln highway from Salt Lake City to Ely, and thence to Reno. Cut-in stations will be established one mile apart along the way, and by means of these stations no traveler could ever become stranded at a greater distance than a half mile from a telephone station from which he could call for relief. A traveler will be able to procure an instrument at either end of this route by paying a small deposit on it, just sufficient to insure its return in proper condition when he reaches the station at the other end of his journey.

An Egyptian nobleman's tomb, built 4,500 years ago, and preserved in its entirety, has been placed on exhibition in the Metropolitan Museum of Art in New York City.

Bohemia is preparing to buy blooded mares in North and South America, as soon as opportunity arises and to dispose of them at auction to breeders and farmers in various parts of the empire.

After an exhaustive series of tests a group of Chicago engineers decided that proper fenders on automobiles will reduce the number of persons run over when struck to 2 per cent, and the number of seriously injured to 25 per cent.

Navigators say that the highest tide in the world is in the Bay of Fundy, between Nova Scotia and New Brunswick. The tide there sometimes rises to the height of 71 feet, and the increase is occasionally as much as a foot every five minutes.

THE EUROPEAN WAR A YEAR AGO THIS WEEK

June 5, 1915.

French made important gains north of Arras and in Labyrinth, and retook Souchez sugar refinery. Left wing of Austro-Germans threatening Lemberg checked by Russians.

Fierce battle on Isonzo at Tolmino.

German Taube bombed Calais.

June 6, 1915.

French made further big gains but were repulsed on Loreste slopes.

Austrians defended Tolmino desperately.

Italians failed to cross Isonzo near Sagrado.

Zeppelin raided east coast of England; 24 killed.

June 7, 1915.

Germans lost more ground to the French at Neuville-St. Vaast and the Labyrinth.

Teutons crossed the Dniester.

Italians made general advance across the Isonzo from Caporetto to the sea.

Austrians retook Freikofel from Italians.

Turks beat allies near Sedd-ul-Bahr.

Sub. Lieut. Warneford destroyed Zeppelin in duel 6,000 feet in air.

Italian dirigible bombed Pola.

June 8, 1915.

French made advances south of Arras and in the Labyrinth.

Teutons pushed back Russians in East Galicia.

Secretary of State Bryan resigned, disapproving president's policy toward Germany.

German submarine sank six more vessels.

Austrian aeroplanes bombed Venice.

June 9, 1915.

French gained at Neuville-St. Vaast and the Forest of Le Pretre.

Austro-Germans took Stanislaw. Italians captured Monfalcone.

Allies landed more troops at Sedd-ul-Bahr, Gallipoli.

Second American Lusitania note sent to Germany.

British destroyed German submarine.

German submarine sank British steamer Lady Salisbury.

June 10, 1915.

Germans took French trenches near Souain and Les Mesnil.

Russians forced Germans to retreat in Baltic provinces and advanced in Galicia.

Teutons in Bukovina crossed the Pruth.

Italians occupied Podestagno, north of Cortina.

Two British torpedo boats and many other vessels sunk by German submarines.

Germany insisted the W. P. Fry case go before a prize court.

June 11, 1915.

Russians defeated Mackensen's army and hurled Linsingen's army across the Dniester.

Italians took Ploeken.

Fierce fighting for Goritz and along the Isonzo.

Severe fighting near Maidos, Gallipoli.

Garua, German West Africa, surrendered to Anglo-French force.

Turkish cruiser Midulla sank Russian destroyer in Black sea.

WORTH KNOWING

Children from sanitary homes advance more rapidly in school than those from dirty premises.

Quicksilver is 13 1/2 times heavier than water.

Every square mile of sea is estimated to contain about 120,000,000 fish.

The 12 countries having the least blindness are as follows: Belgium (before the war) had 43 blind persons to every 100,000 of the population; Canada, 44; Netherlands, 46; Saxony, 47; New Zealand, 47; Western Australia, 50; Hongkong, 51; Prussia, 52; Denmark, 52; Germany, 60; New South Wales, 60, and the United States, 62.

Except that of China, San Marino has the longest national hymn.

Extensive asphalt beds have been uncovered in Honduras.

The United States public health service has trapped 615,744 rodents in New Orleans in the past 18 months.

The failure of the mortality rates of measles and whooping cough to show a reduction during the last 15 years is due to the fact that they are highly communicable in their early stage, when diagnosis is most difficult. An induction balance has been devised for the purpose of locating buried shells in the soil of the former battlefield, so that the farmer may go over it safely with the plow.

Educational Scheme.

"I'm in favor of this proposition to have graphophones in the public schools."

"Are, oh?"

"Yes, it will give the history a chance to repeat itself."—Louisville Courier-Journal.

Undaunted.

"The local police department states that it is not prepared to make thumb print tests."

"What's to be done?"

"Oh, it is still prepared to deduce."

HAPPENINGS of the week IN MISSOURI

St. Joseph's 166 saloons must close every morning from 1 to 5 o'clock by the terms of a city ordinance passed by the council recently. Mayor Elliott Marshall signed it at once. The saloons now close from midnight Saturday to midnight Sunday. This will still be in effect, and the dramshops will be open from midnight to 1 o'clock every Monday morning.

Mrs. Susie W. Davis of Richmond, widow of Clyde Davis, circuit clerk, who was killed in an automobile accident near Buckner last summer, has filed with the county clerk for the Democratic nomination for circuit clerk. Shortly after the death of her husband Mrs. Davis was appointed to serve her husband's unexpired term of nearly a year.

While lowering a timber in the Baldwin mine at Aurora, it fell twenty feet, striking William F. Black, a miner, and crushed his skull. He was 32 years old and had a wife and two children.

Mrs. George H. Ruggles, wife of a farmer residing three-fourths of a mile from Verona, was fatally injured the other morning in a runaway.

Joseph B. Williams, 18 years old, Mayor Henry Williams of Pacific, drowned recently while swimming in the Meramec river. Two companions who tried to rescue him narrowly escaped death.

Two men were killed and a third slightly injured recently in an explosion of gas in the Nevada Mining Company's shaft at Pleasanton, Kas. The dead are Walter Bray and Edward Riggs, both of Nevada.

Henry Bildridge, former city marshal of Centralia, was acquitted by a jury in the Callaway county circuit court of the charge of murder in connection with the killing of Dr. J. Q. Cooper. The jury deliberated twelve hours.

Mrs. James C. Kelly, 82 years old, who came to Lafayette county in 1851, died recently. Her husband and Walter Duncan of Bloomfield, a brother, survive.

Hannibal now has a population of 22,170, which is an increase of nearly four thousand in six years.

Thornton Cooke of Kansas City was elevated to the presidency from the vice presidency of the Missouri Bankers' Association at the closing session of the twenty-sixth annual convention of the body in St. Louis recently.

W. B. Sanford of Springfield was elected vice president, and Edward B. Clare-Avery of St. Louis was chosen treasurer. Preparedness for the United States was indorsed by the association in one of the adopted resolutions.

A meeting was held at Glasgow recently to take some action in getting the War Department to have work done on the Missouri river at Cambridge Bend, about three miles west of there. The river is cutting through at that point, and if something is not done at once it will cut through valuable farm land and make a bridge necessary.

More than 2,000 people witnessed the parade and ceremonies at the laying of the cornerstone of the new Carnegie library in Excelsior Springs. C. H. Briggs of Sedalia, past grand master of the Masons, had charge of the ritualistic work for that order in the ceremonies. Judge Frank P. Divilbiss delivered the principal address.

John Fielding Meek, one of the last of the Mexican war veterans, is dead at his home in Chillicothe. Mr. Meek was born in Wayne county, Ind., in 1824. He was one of the original "boys" of the Erandysine swimming pool, which James Whitcomb Riley later made immortal.

A terrific windstorm and downpour of rain occurred at Collinsa recently. Several houses and barns were blown away. A farmer's team drowned in the creek at a ford just west of town as he was coming to town with a load of hogs. The hogs and man swam out.

The highest price ever paid for best pulp cattle was received on the St. Joseph market recently. Five car loads marketed by a sugar company of Denver averaged 1,570 pounds and sold at \$19.19 a hundredweight. Three other loads shipped by the same concern averaged 1,458 pounds and sold at \$9.90 and four loads averaged 1,361 and sold at \$9.80. The previous record was established there when several loads brought \$9.95.

The population of Quinter, a town in Gove county, 40 miles west of Hays, moved bodily to Hays in a community motor run to visit the state normal school and agricultural experiment station there. The eighty-six cars that made the run conveyed 540 persons.

The exercises of the forty-fourth annual commencement of the Warrensburg Normal school were held in the auditorium recently. Ninety-one young men and women were graduated from the school.

Mrs. John Harris, who resides three-fourths of a mile south of Arvada, Clay county, was attacked by an enraged cow on a road near her home. The cow gored Mrs. Harris with one of its horns and the woman's recovery is doubtful.

Six men were injured, one seriously, when a part of a recovery room at the Atlas Powder company's plant near Joplin was wrecked by an explosion of acids. The workman most seriously hurt was inside the building at the time.

FARMER'S GREAT OPPORTUNITY

Demand for Canadian Cattle After the War.

The opportunities that Western Canada offers to the farmer have time and again been placed before the public through these columns. The cheap price at which the very best lands can be purchased, and the advantage that is to be had in securing one of the free homesteads of 160 acres has appealed to a great many, and they have embraced them. Many, in fact most of those who have done so are today giving testimony to the good fortune and the timely foresight that led them to go to Western Canada, and embark in an era of farming that has placed them away beyond the pinch of want and given them reason to look into the future with a hopefulness that they had not had the courage in the past to forecast.

Not only have they been able to secure good lands at low prices and on easy terms but if they desire they have been able to add to this 160 acres of land free, on conditions that are easy. A resident in the Lloydminster district in Saskatchewan who had been farming in the States for some time, took up a homestead in 1910, and commenced breaking with 4 oxen. Two years ago he bought an adjoining quarter section and now has over 100 acres under cultivation. He says, "As my circumstances improved, I sold the oxen and now have six head of horses, twelve head of cattle, and have always a bunch of hogs on hand."

"On an average I have had yields of 25 bushels of wheat, 55 bushels of oats, and 40 bushels of barley to the acre, and last season from a field of 2 1/2 acres, I threshed 1,049 bushels of wheat. I have made a success of mixed farming and would have no hesitation in advising all who contemplate making a new home to come to this district. I sell cream to the Government Creamery here, and find at all times a good market for live stock and other produce."

This is but a modest statement of what a modest man can do in Western Canada, and could be repeated of hundreds of others.

Scores of cases could be recited where much more has been accomplished, and it is believed that with moderate investment at the present time, the cattle industry of Western Canada will pay large interest.

The Minister of Agriculture of Saskatchewan, in a recent address, ventured the prediction that the Saskatchewan farmer who developed his land along the lines of general stock breeding would make much more money and find a far bigger return for his efforts in ten years' time than the man who devoted his energies purely and primarily to grain raising. This was the coming golden age of opportunity for the stockman and it was up to the Saskatchewan man to get it on the ground floor and prepare him self for the coming demand.

The close of the war would undoubtedly see a great demand for live stock in Europe and it was only reasonable to suppose that this demand would have to be filled almost wholly by American stockmen, both in Canada and the United States. Europe was slowly draining its rural districts not only of its beef and dairy animals but was also using the finer breeding animals and the end of the war would see a condition of affairs which would render necessary almost the repopulation of the domestic animal kingdom in that continent.

The opportunity of Western Canadian stockmen, therefore, lay in being prepared for this demand when it arose. In view of these facts which must be patent to every student of economic conditions as related to the stock industry, he hoped to see within the next three years the stock raising industry in Saskatchewan given an immense impetus forward, which would put it in the forefront of the producing provinces of the Dominion.—Advertisement.

This Way to the Top.

Believers in democracy may find encouragement in the fact, as recently announced, that every one of the twelve directors of one of the most successful dry goods companies in New York city started as a cash boy, office boy or driver, and worked his way up by sheer merit.

YOU MAY LOOK YOUNG

By Keeping Your Complexion Young With Cuticura. Trial Free.

The Soap to cleanse and purify, the Ointment to soothe and heal. These super-creamy emollients do much to keep the skin clear, fresh and youthful, as well as to keep the hair in a live, healthy condition and the hands soft and white.

Free sample each by mail with Book. Address Postcard, Cuticura, Dept. L, Boston. Send everywhere.—Adv.

Driving Bicycle With a Motor.

One of the most ingenious motor attachments for bicycles yet placed on the market has recently appeared in England. The motor, which develops slightly over one horse power, is attached to the luggage rack; it weighs but 16 pounds, and occupies little space.—Popular Science Monthly.

IMITATION IS SINCEREST FLATTERY

but like counterfeit money the imitation has not the worth of the original. Insist on "La Creole" Hair Dressing—it's the original. Darkens your hair in the "natural way," but contains no dye. Price \$1.00.—Adv.

Girls Quickly Led to the Altar.

For the fifth time in two years John Engelsberg, proprietor of a cabaret in Panama city, has come to New York for more cabaret girls. Owing to the scarcity of girls on the isthmus and the attractiveness of the singers none of the four previous assortments have remained true to their art, and single for more than six months.

TAKEN FROM EXCHANGES

The Chamber of Commerce of Buffalo, N. Y., has gone on record as opposed to tag days.

Competition of American Inoleum factories is every year decreasing Scotland's export to this country.

In a Paris aerodynamic laboratory for testing model aeroplanes wind speeds up to 71 miles an hour are produced by ingenious machinery.

A Vienna statistician figures that the Austrian infantry has fired 1,500,000,000 cartridges and the artillery 12,000,000 shells since the beginning of the war.

After ten years of work and an expenditure of nearly \$15,000,000, India recently completed the greatest irrigation project it yet has undertaken.