

YOUNG MAGPIE, JUST OUT OF NEST ABOUT FIVE WEEKS OLD

As in the case of other members of the crow and jay family, there is a difference of opinion as to the value of magpies to man. No doubt they eat many insects, carrion, and very likely a few mice; but they eat eggs and young of other smaller birds, steal more or less grain, and I have heard them accused of picking at sores on the backs of horses, burros and cattle, and doing considerable harm in that manner.

Colorado Springs, Colorado.

MAGPIES ON THE LA PLATA

BY M. FRENCH GILMAN

HE La Plata River is a small stream in southwestern Colorado, much like our southern California rivers. It flows into the San Juan, a tributary of the mighty Colorado. The growth in the river bottom and on the adjacent banks seems to form a magpie's paradise, judging from the numbers of these birds and their old nests. Beginning where the stream issues from the La Plata Mountains, near the mining town of Hesperus, on down the river for about ten miles, the birds fairly swarm. They are found in smaller numbers along the stream to its junction with the San Juan and then down that river as far as I have been: Shiprock, New Mexico.

The center of the population—Pica pica hudsonica population—seems to be near the Fort Lewis Indian School, in La Plata County. Here the river bottom widens and is covered with a dense growth of narrow-leaf cottonwood (Populus angustifolia), black birch (Betula occidentalis), paper-leaf alder (Alnus tenuifolia), two kinds of willow, a few aspens (Populus tremuloides), some scattering pines (Pinus flexilis), and the usual undergrowth of such altitudes, 7,500 to 8,120 feet.

On one side of the river is a mesa covered with scrub oak (Quercus undulata

and Quercus u. gambeli) which gives way to piñon (Pinus edulis) and juniper (Juniperus occidentalis) further down the river; while on the other side the mesa supports a growth of Pinus flexilis which in turn gives way to the piñon and juniper, with some scrub oak in the neutral zone.

This environment and an apparent immunity from the small boy and the gunner makes a condition very favorable to the study of the magpie. Where not disturbed these birds become quite tame and display a familiarity which borders on contempt. On the Fort Lewis school grounds no one is allowed to molest them and they dispute the kitchen scraps with the chickens and cats. For a time I cut all the meat used in the school and the magpies would be on hand every morning at the meat house for the waste pieces of meat, fat and bone. They would drive away the kittens but were more foxy with the old cats, one bird attracting the feline attention while another annexed the meat. They were rather familiar about the government kitchen and showed decided affection for the garbage barrel. When the pigs were fed was their opportunity. One morning when the snow was three feet deep on the level and the thermometer twelve degrees minus, I counted over one hundred of the birds at, on and in the pig pen. The pigs were too busy to resent their presence and some carried from one to three of the birds about on their backs—a convenient footwarmer for the magpies! All winter the pig pen was a rendezvous for from 75 to 125 of the birds and a few were on hand for meals during spring and summer tho most of them had then scattered along the river for nesting.

A peculiar feature of their actions was a decided knowledge of the "dead line" and a fair idea of the range of a shotgun. Inside of the school grounds they were tame and confiding, allowing me to approach within a few yards of them. But outside they were bronco and kept about 75 or 100 yards in the lead. I wished to secure a few specimens but of course respected the ground rules and also the birds' apparent trust in mankind. But out of bounds it was every bird for himself, and even then it was sometime before a specimen was secured. This, of course, was before the nesting season. When that opened the birds became more approachable, especially as they saw I did not molest them.

The first nest of the season was found March 28, about half completed, I judged. A week later it was full of snow. On March 31, I saw two more about as far advanced in construction as the first. The birds seemed to take their time in building, tho perhaps the frequent snows at that time interrupted their work. For on April 28, the nest I found just a month before contained seven eggs slightly incubated. The earliest instance of building was a nest with one egg on April 8, which nest had a complete set of eight eggs, April 15. During the latter half of April and the whole of May, I examined at least thirty nests. I found that the earlier sets were largest, most of them containing eight eggs. Five of the seven nests inspected in April had eight eggs, while two had seven each. Most of the nests examined during the first half of May contained seven eggs. Of nests observed after May 15, several had six eggs, two had five, and one contained four eggs: all complete sets.

Nesting places varied, many of the birds building homes in big pine trees on the mesa, but the majority of nests were placed in the narrow-leaf cottonwoods along the river bottom. A few built in scrub oaks, some in willows, and others in black birches. The height from the ground at which the nests were built varied from four to sixty feet; sixteen or eighteen feet was a fair average for the nests examined. Nests built in pines were generally highest and those in willows low-

est, tho I found one against the trunk of a cottonwood only five feet from the ground, while the tree was at least fifty feet tall. Nests in willows, caks and birches were nearest the ground. The high nests were those in trees located along a highway, or in a lone tree on the mesa or in a clearing. The low nests were nearly always in trees or shrubs in a thicket, or else in wet marshy ground, hard to get at. The nest only four feet high was in a willow that stood on a tiny marshy island in a pool of stagnant water. One, five feet high, was in a willow on very boggy ground, with stagnant pools on three sides of it. One exception was a nest six feet from the ground in a cottonwood tree alongside of a much used wood road. But as this nest had only four eggs, the parents were probably not very particular whether their family matured or not. But it did, and made a safe get-away in spite of the low and exposed situation.

The birds did not seem very shy while building, and were rather in evidence when the nest contained eggs. But when the eggs were hatched! The old birds would come and perch on a branch just over my head or at one side barely beyond arm's length and tell me what they thought of me. And the way they swore at me was something fierce—if it was not swearing I'm no judge of profanity! Several times a bird only four feet from my head would savagely peck the branch on which he, or she, perhaps, sat, all the while muttering various kinds of threats. And if I picked up a young one their wrath was beyond expression. They would call in all the neighbors within a radius of half a mile to help make "war medicine."

The nests varied but little in material or manner of construction, all having the well-defined arch of twigs over the nest and the entrance at one side. times the arch was well connected with the nest proper, allowing insertion of the hand only at the entrance; while with other nests the hand could be thrust thru the "siding" quite easily. There seemed quite a difference in the size of nests and amount of material used. Some were large and well built, the walls being quite firm and the arch so dense that such nests had remained intact for a long Others were small, and quite frail and flimsy, particularly the superstructure—contract work, I presume! I noticed that the earlier nests were the well built ones while the late ones were inferior. I do not mean to say that all the late ones were inferior, but all the inferior ones were late. I think the birds build anew each year, as I saw no repairing done and all nests occupied were new The great number of old nests in a good state of preservation made much work in examining; as often, until I attained some degree of expertness, I would climb up a difficult tree and find the nest to be a last year's one. Twice I was rewarded, however, as the old nest was occupied by long-eared owls. All the nests had thick plastered walls, well lined with rootlets and horsehair. puzzle to me where the birds find so many rootlets when the ground is covered with snow.

The eggs were nearly uniform in size, coloring and markings, and seemed quite small for a bird of the magpie's dimensions. They greatly resemble the eggs of the Brewer blackbird, and also those of the California crow, in color and marking, and are between the two in size—nearer the blackbird, tho. Of the great number of eggs examined I found but one infertile, and only one with the heavier markings at the small end, "bald-headed eggs" the boys call them.

The magpies, with their striking black and white coloration, are a feature of the landscape, or, rather, "snowscape," as it might well be called, for about half the year. A southern Californian's involuntary thought on first sight of the

birds in flight is, "What large phainopeplas!" Their coloring from a distance appears alike, and their method of slow, dignified flight is quite similar. I speak of black and white plumage, but the black of *Pica pica hudsonica* is much mixed with a bronze green.

As far as I am able to judge by observation, the birds are beneficial, not only destroying injurious insects but acting as scavengers as well. Last summer the "grasshopper became a burden" and it was gratifying to see fifteen or twenty large families of magpies and as many Brewer blackbirds in the alfalfa fields all catching the hoppers.

Breen, La Plata County, Colorado.

AMONG THE GULLS ON KLAMATH LAKE

BY WILLIAM L. FINLEY

WITH PHOTOGRAPHS BY HERMAN T. BOHLMAN

HE lake region of southern Oregon is perhaps the most extensive breeding ground in the West for all kinds of inland water birds. The country is overspread with great lakes, several of them from twenty to thirty miles across; and reaching out on all sides of these are vast marsh areas and tule fields extending for miles and miles.

The latter part of May, 1905, we set out to study and photograph the bird life of this region. For several days we packed thru the mountains with our heavy camera equipment, and then across a rolling, sage-brush country till we reached Lost River, which empties into Tule or Rhett Lake. Here we abandoned our horses for a stout rowboat, and then for over a month we cruised about Tule Lake, crossed over to White Lake and out into the Lower Klamath.

Tule Lake is a body of water about twenty-five miles long and fifteen to twenty miles wide, cut thru the northern half by the Oregon and California boundary line. A few miles to the northwest is Lower Klamath Lake, about the same size. Between these two larger lakes is a smaller body of water called White Lake, separated from the Lower Klamath by a broad strip of tule land.

The border of these lakes is a veritable jungle. The tules grow in an impenetrable mass from ten to fifteen feet high, and one can never get to a point where he can look out above the tops of the reeds and see where he is going. Then the foundation below is made of decayed vegetation and is treacherous to tread upon. One may wade along in two feet of water a short distance and sink over his head at the next step. We found a few places where the solid roots had formed a sort of a floor at the surface of the water, which was buoyant enough to support us. These precarious footholds were the only camping spots we had for two weeks.

In Lower Klamath Lake stretching for miles and miles to the west is a seemingly endless area of floating tule "islands," between which flow a network of narrow channels. These so-called islands are composed of the decayed growth of generations of tules. Most of them are soft and springy, and sink under the weight of a person.

Gulls love society. They always nest in colonies and live together the entire year. They are most useful birds about the water-fronts of our cities. These gulls have developed certain traits that mark them as land birds rather than birds of the sea. In southern California and Oregon I have watched flocks of them leave the ocean and rivers at daybreak every morning and sail inland for miles,