

Besides the birds secured we shot two examples of *Hæmatopus frazari*, but they both fell in the heavy surf among the rocks and we were unable to secure them."

Ptychoramphus aleuticus (Pall.). Fourteen adults of both sexes, April 26.

Falco peregrinus anatum (Bonap.). One adult male, April 26.

Trochilus costæ (Bourc.). Two specimens, April 26.

Otocoris alpestris enertera Oberholser. Seven adults, both sexes, April 26.

Salpinctes obsoletus obsoletus (Say). Two adult females, April 26.

Carpodacus mcgregori Anthony. Five specimens, two males, apparently adult but with no red in the plumage, one adult female, and two nearly full-grown young males, April 25 and 26.

It had been thought that this very distinct species, peculiar to these small, barren islands, was nearly if not quite extinct. Unfortunately Mr. Brown did not note how many individuals he saw during the two days he spent at the San Benito Islands.

Passerculus rostratus sanctorum (Ridg.). Thirteen specimens, adults of both sexes, and young. In this series there are eight breeding birds in worn plumage, four nestlings—one apparently just out of the nest—and one, probably a young of the season, in fully acquired autumnal plumage, April 25 and 26.

Boston, Massachusetts.

THE WOODHOUSE JAY IN WESTERN COLORADO

By ROBERT B. ROCKWELL

THESE are few if any American birds which have received less recognition from Ornithological writers than the Woodhouse jay; hence a few observations regarding this bird may be of interest.

The writer's acquaintance with the Woodhouse jay was mostly acquired in the eastern part of Mesa County, Colorado, which is located on the western edge of the State adjoining Utah, and about the middle of the State north and south. The eastern part of the County is mountainous, ranging in altitude from 5,000 to 10,000 feet and for the most part is well watered and timbered. Thruout this section in localities ranging from 6,000 to 9,000 feet this jay is a common resident thruout the year.

During the winter months they are found in large numbers in the brush-clad gulches and ravines in the lower part of their range and usually not far from cultivated ground, where they feed largely upon grain and seed in the barn-yards, feedlots and fields. During this period they become very tame if not molested and will even occasionally slip into an open kitchen door in quest of some tempting morsel. Like the rest of the jays they are very inquisitive birds and a good deal of their time is spent "investigating." When feeding they are very quiet and seldom make any noise unless surprised or frightened.

They are at all times very cautious birds and altho they are fully as plentiful around the meat bait in coyote traps as the magpie I have never known of a jay being trapped, while large numbers of the magpies are caught in this manner.

As soon as the first feathery green appears on the scrub-oak covered hillsides Woodhouse forgets his domestic habits of the winter and thruout the summer is seldom seen in the vicinity of the ranch houses except when on some short foraging expedition.

Their favorite haunt is a gulch on an open hillside, which is heavily covered with scrub-oak, service-berry and pinyon, and here they are found in numbers, flitting thru the underbrush and keeping out of sight as much as possible, but continually uttering the coarse, grating cry characteristic of so many of this family.

When undisturbed they will occasionally mount a high fence post or the top-most branches of a small pinyon tree in plain sight of the surrounding ground, but when disturbed they quickly disappear and trust largely to the cover of the underbrush for protection.

As the breeding season approaches they are much quieter and very retiring in their habits, and when incubation begins only a careful search will satisfy the ob-



NEST AND EGGS OF THE WOODHOUSE JAY: FROM PHOTO TAKEN IN
MESA COUNTY, COLORADO, JUNE 16, 1903

server that there is a Woodhouse jay anywhere in the country, except for an occasional male bird who flies aimlessly about, in a manner thoroly exasperating to the observer who wonders where the nest is.

In the location and concealment of the nests they are evidently adepts, as in five years' observations I found but two nests, one of which was unoccupied; and even after the leaves have dropped in the fall they are rarely seen, a fact which can only be accounted for by the birds' rare art of concealment, for the nests are far too strongly built to weather away during the period between their occupancy and the falling leaves, and the birds are so abundant in all suitable localities that nests must be more or less common.

My first experience with the breeding birds occurred on June 16, 1903. I was carefully beating out a rather steep hillside sloping down from a high sandstone butte, at an altitude of about 6800 feet, looking for nests of the Wright flycatcher. The hillside was badly washed by the spring rains forming little gulches in the red adobe soil. The entire area was well covered with patches of service-berry, buck-brush, scrub-oak and an occasional pinyon.

As my pony brushed against a peculiarly thick clump of service-berry I heard a very slight flutter and not seeing a bird fly out, I dismounted and forced my way into the clump. As I did so the bird slipped quietly out on the other side and I caught a fleeting glimpse of her as she flew, barely a foot off the ground, into a nearby bush.

The nest, for such it proved to be, was built near the center of the clump and about four feet from the ground. It was held in place by a thick net-work of small angular twigs and two larger vertical branches none over $\frac{3}{8}$ inch in diameter. The only concealment afforded the nest was the thick mat of leaves at the extremity of the branches which formed a sort of canopy about the exterior of the bush, not a leaf being near enough to the nest to afford concealment; but right here is where I discovered the secret of their concealment. The outer structure of course so nearly resembles the network of small twigs in the service-berry bush that it was difficult to tell where the nest stopped and the twigs began.

The nest itself, which at first appeared to be a rather fragile structure, upon closer examination proved to be a remarkable piece of bird architecture. It was composed of a platform of very crooked dead twigs, thickly interlaced to form a basket-like structure, in which the nest proper was firmly placed. The latter, which was entirely separate from the outer basket was a beautifully woven and interlaced cup, composed of fine weed stalks on the outside, giving place to fine, brown, fibrous rootlets toward the interior which was sparingly lined with horsehair.

In general appearance the exterior was not unlike the nest of the white-rumped shrike, while the interior or nest proper closely resembled a black-headed grosbeak's nest. The entire structure, while not particularly artistic, exhibited a high grade of bird architecture and was remarkably strong and durable.

The nest outside measured about six inches in diameter by six inches in depth, and the interior structure measured outside $4\frac{1}{2}$ inches in diameter by $2\frac{3}{4}$ inches deep; inside $3\frac{3}{4}$ inches in diameter by $2\frac{1}{4}$ inches deep.

During the entire time I was examining and photographing the nest the male remained at the very top of a nearby service-berry bush, perfectly silent and apparently unconcerned. After flushing her from the nest I did not see the female again.

The nest contained three beautifully blotched eggs in which incubation was well advanced. They measure 1.12x.81, 1.12x.82, and 1.10x.80.

I am inclined to think that the date of nesting given by most authorities, is somewhat earlier in that altitude, as the service-berry and scrub-oak are not leafed out enough to furnish suitable concealment until late in May and I think about June 1 is an average date for fresh eggs in that locality.

The young of the year are not very much in evidence until they are well matured, but during August and September by which time the young are all able to take care of themselves the birds are particularly conspicuous and noisy.

It has been stated upon good authority that these birds are addicted to nest robbing, but I have never seen any indications of this and judging from the good feeling which apparently exists between these birds and other species I am in-

clined to think that their depredations are not as extensive as those of others of the jay family.

As soon as the young birds are able to travel there seems to be a sort of vertical migration, during which large numbers of the birds ascend a few thousand feet into the heavier timbered country, evidently in search of insect food, although I have not examined stomachs to verify this statement. This vertical movement does not affect the entire number of the species for, as I have stated, during August and September the birds are much in evidence thruout their range.

With the first frosts they congregate in small scattered flocks and perform whatever migration may be credited to them, which I am inclined to think amounts to very little, usually before the first big storm; but climatic conditions seem to have very little effect upon them, food supply alone being responsible for their migratory movements.

When the winter coat of white has entirely covered their food on the bleak hillsides, they return to their winter haunts nearer the inhabited sections where the waste from barn-yard and granary affords an abundant food supply until spring comes again.

Denver, Colorado.

THE BREEDING BIRDS OF ESCONDIDO

By C. S. SHARP

THE territory covered in the following list lies in the west-central part of San Diego County and about thirty to thirty-five miles north of San Diego. It comprises the valleys of Escondido and San Pasqual and part of the Bernardo Rancho. Escondido, by which name both the town and valley are now called, was originally an old Spanish grant, Rancho Rincon del Diablo, which comprised some 13,000 acres of hill and valley land. San Pasqual and Bernardo adjoin the grant on the east and south and both are crossed, San Pasqual for its whole length, by the Bernardo River, which takes its beginning in the mountains to the east in the Santa Ysabel and Pamo creeks. As the Bernardo River it flows in a general westerly course and finally reaches the coast as the San Dieguito River at the big laguna of that name lying north of Del Mar.

Where it leaves what we call Crescent Valley (below Bernardo and southwest of Escondido) and takes its way between the hills to the laguna and the sea, some twelve miles away, the elevation above sea level is 225 feet (U. S. Geological Survey). At the upper end of San Pasqual the elevation is 350 feet, distance about ten miles, Bernardo lying between. At Escondido the elevations run from 700 to 800 or 900 feet, with many hills scattered over the valley, and principally on its outskirts, running up a few hundred feet more; distance inland about fifteen miles.

The greater part of all this is under cultivation; only the higher hills retain their covering of brush, and live oaks that once were plentifully scattered over the valley are only found now on some of the higher northern exposures and in the ravines.

Much of the land is given up to farming and there are hundreds of acres of orchards and vineyards. San Pasqual and Bernardo are wholly dairy and farming countries with few orchards, many alfalfa fields, and several fine eucalyptus groves. All along the Bernardo river for nearly its entire course to Crescent Valley