

Some Western Birds

By E. LAURENCE PALMER

Illustrated by Hope Sawyer

This is the twenty-fourth in Nature Magazine's series of educational inserts.



ARKANSAS KINGBIRD



BULLOCK'S ORIOLE



LARK SPARROW



CACTUS WREN

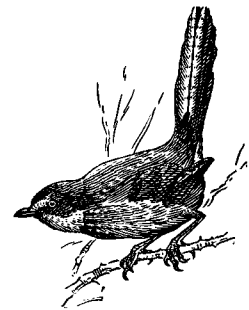
WHILE hiking in the Eaton Canyon region near Los Angeles, I was joined by another hiker. He seemed much interested in what I was doing—until he learned that I did not happen to be a member of a noted mountaineering club. He left me in disdain after I, an easterner, had confessed this serious shortcoming in my social standing. I continued my hike to a little falls about which one of my favorite Nature writers had written, and where he had said that there was a water ouzel's nest. I found the falls in safety, and, sure enough, the nest was there and I saw my first water ouzel. As I was looking, I was nearly struck by some falling gravel. Then down came some more gravel, followed by a cascading mountain hiker. He landed unhurt on the portion of his anatomy reserved for that purpose, but, when I laughed, picked himself up and limped down the stream without saying a word. Not once did he deign to look at the water ouzel's nest about which I had read thousands of miles away. Possibly a dipper's nest was an old story to him, but I rather doubt that he had any interest beyond trying to maintain his standing in his club. What I had seen of his ability to get about on the rocks hardly suggested high prowess.

I mention this incident because it illustrates a danger that arises if any lover of the outdoors lets himself become too much of a specialist. Possibly, I owe this viewpoint to my natural inclinations, but I am certain that such writers as Mills and Muir helped me confirm my convictions.

I have a dog-eared copy of Mills' *Wild Life in the Rockies* given me as a Christmas gift thirty years ago. It is from this book that I gained my first interest in such birds as the Clark's crow, Bullock's oriole, Arkansas kingbird, magpie, raven and other western species. I wanted to see them; and waiting a decade for the privilege only whetted my appetite to find something such as a water ouzel's nest.

Since that first visit to Eaton Canyon, I have seen many water ouzels; found their nests from Los Angeles north into Canada and east through Utah. I have never tired of watching and listening to them. They remind me of a Louisiana water thrush, which haunts a canyon near my home, but the ouzel excels the water thrush in every way. I remember how surprised I was to see an ouzel disappear under water in a swiftly-flowing stream and come to the surface at some relatively distant stone apparently none the worse for the experience. I do not see even now how it is done. Any bird that can perform a feat like that is entitled to be as vociferous as the water ouzel.

This series of inserts has already considered many western birds of the waterways and of the desert lands. The ninth, thirteenth and fourteenth inserts all had illustrations and life history material on western species of birds.



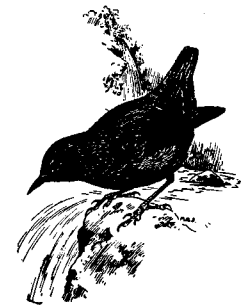
WREN-TIT



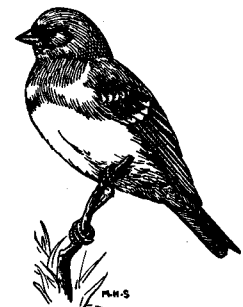
MT. BLUEBIRD



LARK BUNTING



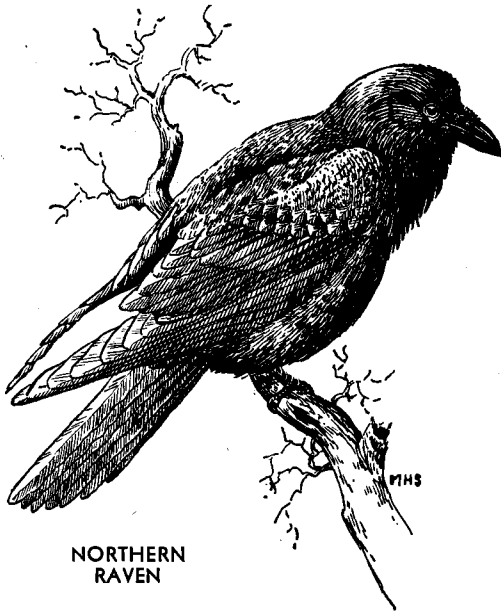
WATER OUZEL



LAZULI BUNTING



HOUSE FINCH



NORTHERN
RAVEN

Since these units dealt with deserts, marshes and waterways, and with game birds, they failed, for the most part, to consider the birds that you and I would see and hear in the familiar fields and woodlands of the West. I have also applied a loose definition to "West", and have included some of the characteristic mid-West species that an easterner would notice on his way West.

A rather close western relative of our water ouzel that startles an easterner is the wren-tit. I saw, heard and recognized my first of these birds in southern California. So loud was its call that it was hard to believe that such a small bird could make it. It behaves much like some of our more wary eastern wrens but neither the wren-tit nor the water ouzel belong to the wren family.

Another haunter of western brushlands is the lazuli bunting, one of our most beautifully-colored birds. This bunting favors open country where brush borders the brooks and the smaller, relatively slow-flowing streams. I got really acquainted with a lazuli for the first time in Utah. His behavior is something like that of the dickcissel of the mid-West, or, possibly, the indigo bunting of the East, and his song is something like that of the lark sparrow. But his appearance is his own, and once he has been seen well or heard distinctly he will be easily remembered. The lazuli is the sort of bird that an easterner sees pictured in the books and decides that the western artist who drew the picture must have been characteristically pepping things up a bit. All this is forgotten with your first real introduction to the bird.

Another western bird that one feels the artists must have overdone is the violet-green swallow, the bird that crashes the front page of the eastern newspapers once a year when it keeps its migratory schedule at the mission

of San Juan Capistrano. This swallow lives in a great variety of places from Alaska to Central America, and, so far as I know, has not been found living, even accidentally, east of Illinois. It is a strict westerner and a westerner worth knowing.

When you talk of an oriole in the West, you usually refer to the Bullock's oriole. While it builds nests somewhat similar to those of the Baltimore oriole, it cannot match the eastern bird in brilliance of color or in vigor of song. The first time I heard one I thought that it must be an oriole and yet could not be.

The Bullock's oriole lives in the same sort of places where man builds his home and raises his crops. Like man, he enjoys cherries, but unlike man he makes some nine-tenths of his diet of the insect enemies of plants. Obviously, his good deeds should be appreciated and his minor strayings from the straight and narrow path should be forgiven by the orchardist.

I saw my first house finch in the backyard of a Los Angeles home. At first I thought it was a purple finch such as I had left singing in my backyard a few weeks before. I learned, however, that the purple finch of the West is larger than this house finch and favors woodlands more than back yards. When you see a house finch out in the cactus land, however, you wonder how such a beautiful bird can sing so happily in a region that seems to offer so little to a bird.

The mountain bluebird is another bird that lives about the homes of westerners. Yet I spotted my first one from a train window in New Mexico. Somehow, it is usually either color or sound that fixes a bird in the memory, although with such as the roadrunner, it may be motion and form. The mountain bluebird I saw looked exactly like the pictures I had seen in the

books so I was not particularly excited. No book could adequately picture the behavior of a road-runner, however, and I was glad I was in an observation car when I first spotted one.

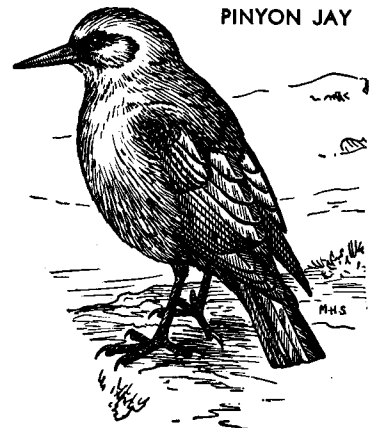
I have been to the West Coast more than a score of times, and there is one bird that I always look for on the way—the magpie. The last one I saw coming east was in mid-Nebraska, but usually they are



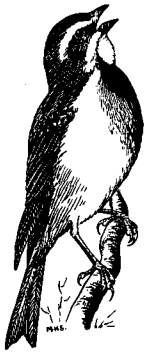
VIOLET-GREEN
SWALLOW



CALIFORNIA WOODPECKER



PINYON JAY



DICK-
CISSEL

not common this far east. This is a bird whose behavior, coloration, voice and reputation all provide something about which people like to talk. There are those who swear eternal vengeance on every magpie they see. There are others who will interminably tell you of what their pet magpie did. Dr. Arthur A. Allen of Cornell brought one east with him a few years ago and it lived mischievously in the trees about his home in Ithaca until it got picked off one night by some enemy. One thing is certain, a magpie usually knows "what's cookin'" and is going to be in on the feast if it is at all safe to do so. Easterners headed west usually spot their first magpie tugging away at some jack-rabbit killed by a car on the highway. These birds are good judges of speed, and usually know just when to leave the feast to escape being hit themselves. Sometimes they waste little time getting back after the car has passed. Although I have seen a few of these long-tailed, black and white birds that have been killed by cars, they are the exceptions, probably young or very old birds either inexperienced or not on the alert for their safety.

Of course, the magpie shares the fate of all scavengers, and since many magpies will gang up on young lambs or sick calves they undoubtedly deserve some of the bad reputation they have. Where they are too numerous, they must, of course, be controlled, but I hope the time will never come when watching for these birds on my way west will fail to be rewarded. Somehow, when you see the first magpie you give a good stretch and say, "Well, at last we are getting somewhere". The monotony of fine farms with rich corn and fat hogs and steers, such as characterize the Corn Belt, will begin to disappear with the appearance of the first magpie. There will be monotonous miles of sagebrush with no hogs and with gaunt steers ahead, but by the time they get to be too

boresome you will be in wild country, and will have to be watching the turns and seeing who can first spot a snow-capped peak in the distance. After that, there will never be monotony. So probably the reason I welcome a magpie on my trip is that it holds a promise for better or different things to come.

The borderland of the West, where the magpies begin to appear, is not without its attractive and interesting birds. Here is the homeland and singing territory of the lark bunting with its conspicuous white wing patches; the lark sparrow with the white around the corners of his tail; the dick-



MAGPIE

cissel that perches on the telephone poles and looks like a little meadowlark with his black bib and yellow breast. During the years that I lived in the middle West, I never tired of the dickcissel and the lark sparrow, and that was not because they were uncommon. Dickcissels are almost as common in Iowa as corn and hogs, and no one can suggest a better simile than that. Of the three, I think I enjoyed the dickcissels the most, even though the hogs and the corn helped pay my salary. Somehow, the lark sparrow and the lark bunting have never been able to compete with that little dickcissel, so I will leave him ruling the roost and deal with some other birds.

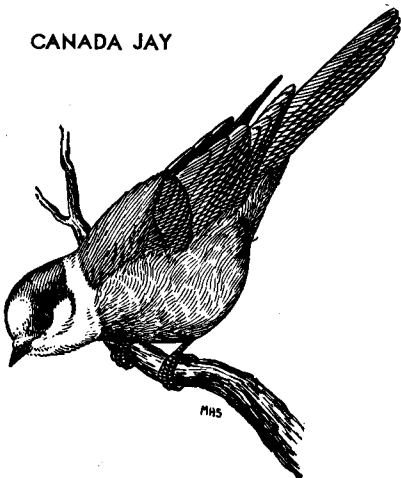
The Arkansas kingbird, with his white-bordered tail, lets an easterner know he is different from the eastern kingbird, with its white-tipped tail. An artist who wanted to draw a picture of a telephone pole with accessories that would indicate that it belonged in the middle West could do no better than show a nest of this kingbird at the top and a hole of a red-headed woodpecker in the side. The woodpeckers used to thrive in the horse and buggy days by having these nest sites erected for them, but with the advent of fast cars they are being wiped out rather seriously in spots. In my recent trips to the West, I have been more impressed by the scarcity of red-headed woodpeckers than by any similar decrease in numbers of the kingbirds. Possibly, this is because the red-head is more spectacular and would therefore be more likely to be missed.

Of course, the woodpecker we most commonly associate with the far West is the (Continued on page 168)



CLARK'S
NUTCRACKER

CANADA JAY



COMMON NAME SCIENTIFIC NAME ORDER FAMILY	CALIFORNIA WOODPECKER <i>Balanosphyra formicivora</i> Piciformes Picidae	VIOLET-GREEN SWALLOW <i>Tachycineta thalassina</i> Passeriformes Hirundinidae	ARKANSAS KINGBIRD <i>Tyrannus verticalis</i> Passeriformes Tyrannidae	CANADA JAY <i>Perisoreus canadensis</i> Passeriformes Corvidae
DESCRIPTION	Length, to 9 inches; wing, to 5.8 inches; tail, to 1 inch. Female, slightly smaller than male. A squarish, whitish or yellow patch is next to the red crown. Upperparts, glossy greenish. Female has a black band separating white of forehead from the red of the crown. When in flight, appears black and white, with large white rump and wing-patches. Markings indistinct in young.	Length, to 5 inches; wing, 4.7 inches; tail, 2 inches; bill, .2 inches. Female, smaller than male, length, 4.5 inches. Crown and head, bronze-green to purple bronze; wings, green with purple tinge; upper tail, purple; sides of rump, white; tail and wings, black, with blue gloss. Female, duller than male. Young, sooty brown above.	Length, to 9.5 inches; wing-spread, to 16.5 inches; tail, to 4 inches. Female, slightly smaller than male. In this species, white on tail borders sides instead of tip, so there should be no mis-identification. Crown patch on female is smaller than that on male, as in eastern kingbird.	Length, to 12.1 inches; wing-spread, to 17.5 inches; tail, to 6.3 inches. Female, smaller than male. Appears in field like large gray bird with dark cap, white throat, inquiring nature, lots of nerve and, somehow, a sense of humor. Young, are dark, slate colored. Sexes, colored alike.
RANGE AND HABITAT	Five subspecies recognized to include: the Ant-eating, the Mearns, the California, the San Pedro and the Narrow-fronted Woodpeckers. Range covers the southwestern United States, from Oregon to Texas and, with some subspecies, south through Mexico; with related species, into northern South America.	Breeds, from central Alaska to central Alberta and south to northern Lower California and northern Durango, and east to western South Dakota and Nebraska. Winters, in Mexico and south to Guatemala and Costa Rica, going through western Texas in migration. Accidental in Illinois.	Breeds, from southern British Columbia to Minnesota and south to northern Lower California, Chihuahua, and western Texas. Winters, from western Mexico to Nicaragua. Occasionally, found in Massachusetts, New York, Florida, Virginia, South Carolina, Maryland, Maine, Michigan, Wisconsin and Illinois.	Three subspecies include; the Canada, the Rocky Mountain and the Alaska jay. Canada jay breeds from Alaska and northern Mackenzie to Labrador, and south to central British Columbia, northern Minnesota, northern New York and farther south in high mountainous areas. Rocky Mountain jay ranges south to Arizona and New Mexico.
REPRODUCTION	Nests, usually, in a hole, in white oaks, but also in pines, cottonwoods, black oaks and other trees. Hole, usually 6 to 18 feet from ground. Eggs, 4 to rarely 6, white, with little gloss, 1 by .8 inches. Incubation, by both parents, 14 days. Sometimes, 2 females use same nest. Young, blind when hatched. Juvenile feathers molted second fall.	Nests, in cliffs, old woodpecker holes, and in hollow trees. Nest, with a lining of grass, and an inner lining of feathers. Eggs, white, 4 to 5. Incubation, probably as with other swallows. In Oregon, the violet-green swallows seem to take readily to nesting boxes and are not infrequently found in attics and abandoned houses.	Nest, placed on branch of tree like that of eastern kingbird, or on cross-bars of telephone poles. Eggs, 3 to 5, like those of the eastern kingbird but slightly smaller. Incubation, by both sexes, for 12 to 13 days. Both parents assist in the rearing and protection of young. Annual broods, 1 or 2.	Nests, mostly in coniferous forests, often in wooded swampy areas. Nest, large, relatively neatly built, of twigs, lined with grass, mosses and soft lichens. Eggs, 3 to 5, grayish, or with yellowish tinge, 1.21 by .88 inches. Incubation, from 16 to 18 days. Annual broods, one. Commonly travels in pairs. Breeds very early in spring.
FOOD HABITS	Food; chiefly acorns, rarely fruit and sap. Acorns are stored by being driven into holes in outside of trees, often sufficiently to cover wide area. Acorns are driven into crevices to be held for opening; the feet not used for holding food. Sometimes, as many as 1500 acorns stored on one telephone pole.	Food; is practically 100% insects. Bugs make up one-third of the food, with leaf hoppers being an obvious favorite. Wasps and wild bees, constitute one-sixth of the diet; beetles, about one-tenth and ants slightly less. The migration is leisurely in the fall but en masse in the spring.	Food; known to be 90% insects; the remainder, mostly wild fruits and seeds. The food is, for the most part, caught on the wing. The number of beneficial insects found in 109 stomachs was too small to have any significance.	Food; will eat almost anything that can be considered as edible, cleaning up garbage about camps, eating fish, eggs, meat, soap, toothpaste and great quantities of insects. Stomach of one bird had approximately 1000 tent caterpillar eggs in it. Also eats mice and beetles.
RELATIONS TO MAN	Probably not important economically. Rare cases of eating eggs of other birds; frequent cases of mutilating trees, and wholesale cases of destroying acorns not to the bird's credit. Rumor that only injured acorns are eaten are not well founded.	Its use to man should be obvious by an examination of its dietary habits. Few birds can equal or excel its beauty either while perched or when in flight and its food habits are exemplary so far as man's interests are concerned.	The species is undoubtedly one of the most useful species of birds in its range. It is entitled to every possible protection, from federal, state, and from private sources. The bird should be studied more in schools than seems to have been the case.	Always an interesting bird about camp, even if it is mischievous and sometimes annoying. Those who have studied it most carefully and personally claim that, in general, the bird is highly beneficial though in individual instances this might be highly controversial. Called Camp Robber and Hudson Bay Bird.

AMERICAN MAGPIE <i>Pica pica</i> Passeriformes Corvidae	NORTHERN RAVEN <i>Corvus corax</i> Passeriformes Corvidae	PINYON JAY <i>Cyanocephalus cyanocephalus</i> Passeriformes Corvidae	CLARK'S NUTCRACKER <i>Nucifraga columbiana</i> Passeriformes Corvidae	WREN-TIT <i>Chamaea fasciata</i> Passeriformes Chamaeidae
<p>Length, to 21.7 inches; wing, to 8.4 inches; tail, to 11.9 inches, bill to 1.4 inches. Weight, 5.3 ounces. Nostrils, covered with bristles. Extremely long tail that tapers, half its length; conspicuous black and white markings serve to identify. Sexes, colored alike. Young, with usual glossy black areas, dull black.</p>	<p>Length, to 26.5 inches; wing-spread, to 56 inches; tail, to 10.95 inches; bill, to 3.25 inches. Female, smaller than male. Black all over. Nostrils hidden by bristle-tufts. Tail appears rounded at the tip, when bird is flying; and size is such that it should not be confused with smaller crow. Sexes, alike. Young, like adults.</p>	<p>Length, 11.7 inches; wing, 6 inches; tail, 4.8 inches. General color, a grayish blue. In flight, shows relatively short wings and nearly square-tipped tail. Throat and chest are gray streaked. Female resembles male but is slightly smaller and duller. Young are duller yet, with blue only on the wings and tail.</p>	<p>Length, to 13 inches; tail, to 8 inches. Face, white, and rest of body gray. Central tail feathers, black, but rest of tail, white, above and below. Wings, glossy black, but secondary feathers are white-tipped. Sexes, colored alike. Young, with gray paler; and breast, apparently more spotted.</p>	<p>Length, to about 7 inches, with upper parts, brownish olive, and the lower parts, pale cinnamon, yellowish brown. Tail, wren-like, and bill, long and curved, like that of wren. Crown, hind-neck, wing and tail feathers, grayer than other parts; sides of head and neck, grayish olive. Iris, white. Sexes, colored alike.</p>
<p>Breeds, from Alaska Peninsula, southward, mainly near the coast, to southern Manitoba, south through eastern Washington and eastern slope of Sierra Nevadas, to Arizona and northern New Mexico, east occasionally, to Iowa, Wisconsin, Illinois, Michigan, Ontario, Hudson Bay, and even Quebec. Related yellow-billed magpie, now restricted to southern California, found in California Pleistocene.</p>	<p>Two subspecies, the Northern and the American raven. Northern, breeds from northwestern Alaska to Greenland, and south to the States of Washington, Minnesota, Virginia and in parts of Georgia. American, ranges from southeastern British Columbia to North Dakota, and south to Nicaragua. From California Pleistocene.</p>	<p>Resident from central Washington to central Montana and south to northern Lower California and northwestern Nebraska. Sometimes found on the California Coast and sometimes as far east as eastern Nebraska and Kansas.</p>	<p>Breeds, from southern Alaska to South Dakota, and south through the mountainous areas to northern Lower California, Arizona and New Mexico. In winter, moves farther southward. Occasionally, found in western Nebraska, Missouri, Arkansas, Iowa and Wisconsin.</p>	<p>Five subspecies include; the Coast, the Ruddy, the Gambel's, the Pallid, and the San Pedro Wren-tits, which, in the aggregate, range from the Columbia River in Oregon to the Mexican border in the humid areas to the west of the mountains. They favor cover for the most part.</p>
<p>Usually, lives in colonies or nests in colonies in thickets or trees. Nest, size of a bushel basket, of twigs and dry plant material, with a good lining, sometimes cemented with mud, and with a lateral, covered entrance. Eggs, 7 to 10, grayish or green, dotted, dashed and blotched, with purple or brown; .34 ounces. Incubation, 18 days.</p>	<p>Nests, usually in forests or along the seacoast. Nest of coarse sticks, lined with finer plant material, in a tall tree, or on a rocky cliff. Eggs, 5 to 7, pea-green or olive, with spots of brown, gray or lavender, 1.95 by 1.4 inches. Incubation, 20 to 21 days, by both sexes. One annual brood.</p>	<p>Nests, in colonies, in pinyon pines, junipers and oaks. Nest, deep, bulky, compact, with well formed inner cup, 5 to 12 feet from the ground. Eggs, usually 4 to 5, bluish white, spotted or streaked with brown, or sometimes blotched. Birds stay in pairs even though great numbers nest and feed at common points.</p>	<p>Nest, built in coniferous forests; a platform of twigs, bound with bark, grass and needles; sometimes lined with wool, quilted together to form a mat. Eggs, 3 to 5, pale, gray green, sparsely flecked or spotted with brown, gray or lavender, particularly at the larger end. Incubation, 16 to 22 days. May nest in zero weather.</p>	<p>Nest, in low bushes or trees, rarely if ever over 4 feet above the ground. Nest, made of woven grass, bark, roots, and other vegetable materials, usually lined with hair of horses or cattle. Nest, generally well hidden from prospective enemies. Eggs, 3 to 5, but usually 4, pale bluish green.</p>
<p>Food; grasshoppers, large black crickets, ground beetles, codlin moth larvae, rodents, carrion. Eighty-five kinds of plants and animals recognized in stomach contents including reptiles, amphibians, worms, birds, crustaceans, spiders and scorpions.</p>	<p>A useful scavenger, killing great numbers of mice and rats and injurious insects, but may also destroy young lambs, chickens and even attack weak and injured animals of larger size. Shows exceptional cleverness in outwitting more powerful animals, particularly where a number of ravens work cooperatively.</p>	<p>Food; chiefly nuts of the pinyon pine in season, but also seeds of yellow pine, black pine, juniper berries, wild berries; and insects, such as grasshoppers. Injury has been caused by these birds to some growing crops such as grains and even watermelons, particularly where the birds act in union in flocks.</p>	<p>Food; in summer, nut-like seeds of certain pines, the berries of cedar, beetles, caterpillars, grasshoppers and destructive black crickets of their range. In fall, food is essentially, nut-like fruits of pines. Young fed hulled seeds of pine, regurgitated by parents.</p>	<p>Food; essentially insects, gleaned from the cover in which the bird so easily disappears, but from which it is so frequently heard. Only family of perching birds with representatives to be found only in North America—and this is confined to a relatively small part of continent.</p>
<p>As an insect eater, it has no related superiors; as an enemy of rodents it is excellent. It, however, robs nests of domestic poultry, kills young chickens. It attacks newly-sheared lambs, sick or wounded cattle and by its incessant chattering annoys many people. It undoubtedly is a pest where its numbers are large.</p>	<p>Because of destruction of live stock and poultry where ravens are abundant, their numbers have been greatly reduced; and over much of their original range, they may no longer be found. Certainly great flocks comparable to those of crows no longer exist near intensively cultivated areas.</p>	<p>Undoubtedly, where flocks of these birds congregate near cultivated lands bearing crops or newly planted crops, they may cause much injury. However, it seems that in general they are easily and effectually frightened away by scarecrows and by a little shooting.</p>	<p>Interesting birds about camps, but rather too noisy and inquisitive for their own good. May destroy baits on trap lines and win hatred of trappers. Common and welcome about many of National Parks where they may come to feed out of hand, in competition with ground squirrels so popular with most people.</p>	<p>Probably, useful as insect destroyer, but more useful in confounding naturalist who feels confident that it will be easy to locate a bird capable of making such a loud commanding sound. These birds are common about San Francisco Bay area and invite plenty of inquiry by naturalist visitors to region.</p>

COMMON NAME SCIENTIFIC NAME ORDER FAMILY	WATER OUZEL <i>Cinclus mexicanus</i> Passeriformes Cinclidae	CACTUS WREN <i>Heleodytes brunneicapillus</i> Passeriformes Troglodytidae	MOUNTAIN BLUEBIRD <i>Sialia currucoides</i> Passeriformes Turdidae	BULLOCK'S ORIOLE <i>Icterus bullocki</i> Passeriformes Icteridae
DESCRIPTION	Length, 8.5 inches; wing, 3.8 inches; tail, 2.1 inches. Weight, 2.3 ounces. Slate gray, but paler, beneath; head and neck feathers, faintly tipped with brown; tail and wing feathers, darker brown. Eye-lids, marked with white. Sexes, colored alike. Young, with grayer crown; throat, whitish. Temperature, 106° F.	Length, to 8 inches; wing, to 3.5 inches; tail, 3 inches. Females, slightly smaller than male. Tail, rounded. Feathers of back, brown, with white middle streaks. Tail feathers, brown and black. Underparts, white. Young, with back, spotted, instead of streaked; with white and black spots on the chest; smaller and duller.	Length, to 7.9 inches; tail, to 3.1 inches. Female, slightly smaller than male. Upperparts, plain, clear blue; wings, more violet; underparts, paler and belly, white. Female, head and back, gray, often tinged with greenish blue; rump, and tail, blue. Young, brownish or grayish, somewhat white streaked.	Length, to 8.6 inches; wing, to 4.1 inches; tail, to 3.7 inches. Adult male, in summer, rear upperparts and underparts, orange or yellow; crown, throat-patch, eye-line, fore-upperparts, bill, black; wings, black with white patch and white edgings. Female, head, neck, olive; back and rump, olive gray; throat, blackish.
RANGE AND HABITAT	Breeds, from near tree limit in northwestern Alaska to central western Alberta, and south to southern California and southern New Mexico. Accidental, in the Black Hills of South Dakota and in western Nebraska. An allied race is to be found in Mexico and Guatemala.	Three subspecies include the Northern, the Bryant's and the San Lucas Cactus wrens. The Northern Cactus wren ranges from southern California to Nevada, Utah, New Mexico and central Texas and south to northern Lower California and the northern states of Mexico. Other subspecies in Lower California.	Breeds, from southern Yukon to southwestern Manitoba and, in the mountains, south to southern California, Arizona, New Mexico, Chihuahua and western Nebraska. Winters, from California and Colorado south to Guadalupe Island, Lower California, Sonora, and other parts of northern Mexico, and to Oklahoma and Texas.	Breeds, from southern British Columbia, southern Saskatchewan and eastern South Dakota south to northern Lower California and southern Texas. Winters, in Mexico south to Colima, Guerrero and Puebla.
REPRODUCTION	Nest, on ledge, in gorge, or canyon, over water or often under waterfall; also on rocks, in midstream and on beams under bridges. Nest, bulky, roofed over, with side entrance; made of plant materials such as growing mosses, weeds, pine needles, with a dry, inner nest of finer materials. Eggs, 3 to 5, white. Incubation, 15 days.	Nests, in colonies, building many dummy nests, in which they may roost as well as rear young. Nest, a 6-inch globe of dried grasses, with side entrance; may be used and remodelled in different years; sometimes, lined with feathers; also may be used by mice. Eggs, 3 to 7, white or buff, with many red-brown spots.	Probably, the most beautiful of all bluebirds. It, like the better known species, will nest in bird houses. It also nests in old, abandoned woodpecker holes, commonly in aspen groves, or more commonly, about man's buildings. The eggs are 5 to 7, and are a pale greenish blue.	Nests, in cottonwoods, oaks, mesquites and box elders or among mistletoe. Nest, a hanging bag composed of string, hair, cotton, grasses, shredded bark and with an inner lining of hair, wool or down. Eggs, 3 to 6, grayish or bluish white, marked with irregular hair lines, chiefly around the larger end.
FOOD HABITS	Food; aquatic insects, and small fish, but mostly caddis fly larvae, water beetles, black-fly larvae, dragonflies and their kind. Food, gleaned from wet rocks or underwater. Can walk through water, underwater or swim through it when air temperature is 50° F. below zero. Faster water flows, the better this bird seems to like it.	Food; essentially insects. Sings through the year, but more commonly in summer. Song described as like grinding two small millstones together. Nests placed in cactuses are perfectly protected from most enemies.	Food; over 90% insects and the remaining part largely of waste and wild fruits. The insects include cicadas, grasshoppers, cutworms, locusts, crickets, ants, bees, caterpillars, weevils and other insects, some of which are caught on the wing, the birds acting as flycatchers.	Food; largely insects of the orchards, one estimate indicating that 35% of the total food is beetles, nearly all of which are harmful species; caterpillars and their moths, 41%; and ants and wasps, 15%. The remaining food is largely fruit such as cherries. Young birds are ready to fly by July.
RELATIONS TO MAN	Could not conflict with man's interests if it wanted to do so. Never abundant, is too small to capture large fish even if its diet were essentially fish and its marvellous song and unusual ways hold interest of any fair-minded person who enjoys atmosphere of a gorge and a dashing stream. Dipper is part of such a western stream.	Essentially a useful species and one of the birds which gives life and voice to the desert at times of the day when it might otherwise seem to be wholly quiet and deserted. State Bird of Arizona.	This beautiful bird does so much good and seems to favor living near man so much that it should be encouraged to prosper wherever the opportunity offers itself. It is sufficiently well known and popular to have been selected as the State Bird for Idaho and Nevada.	This oriole is almost entirely useful and probably more than pays for the fruit it eats by the fruit-destroying insects it kills. Its song is one of those which in season dominates other songs within its range and once heard will be again sought.

LAZULI BUNTING <i>Passerina amoena</i> Passeriformes Fringillidae	HOUSE FINCH <i>Carpodacus mexicanus</i> Passeriformes Fringillidae	LARK BUNTING <i>Calamospiza melanocorys</i> Passeriformes Fringillidae	LARK SPARROW <i>Chondestes grammacus</i> Passeriformes Fringillidae	DICKCISSEL <i>Spiza americana</i> Passeriformes Fringillidae
<p>Length, to 5.5 inches; wing, to 3 inches; tail, to 2.3 inches. Female, slightly smaller. Adult male, with upperparts turquoise blue, varying to greenish blue; two white wing bars; breast and sides, brownish but other underparts, white. Female brown, sometimes streaked; rump, greenish blue; chest, brownish and belly, white.</p>	<p>Length, to 6.1 inches; wing, to 3.3 inches; tail, to 2.6 inches. Weight, .66 ounces. Female, about .5 inch shorter, with tail and wing about even in length; streaked gray and brown all over. Adult male, rose-pink throat, rump; line over eye; back which is not sharply streaked; belly, whitish; wings and tail, brown streaked.</p>	<p>Length, to 7.5 inches; wing-spread, to 11.5 inches; tail, to 3.35 inches. Weight, .95 ounces. Temperature, 101° F. Male, like a small, sparrow-sized, blackbird with large white wing-patches. Female, young, and male in autumn, brown, with breast stripes, and conspicuous white wing-patches. Not easily confused with other birds because of wing-patch.</p>	<p>Length, to 6.75 inches; wing-spread, to 11.1 inches; tail, to 3 inches. Female smaller than male. Temperature, 110° F. Conspicuous in field because of white around sides and corners of rounded tail. Shows chestnut patches on sides of head and white breast with one central dark spot. Young birds have streaked breasts, without central spot.</p>	<p>Length, to 7 inches; wing-spread, to 11 inches; tail, to 2.9 inches. Female, smaller than male. Male, like diminutive meadowlark showing usual black bib and yellow breast. Female, paler than female English Sparrow, with yellow breast, chestnut on bend of wing and white stripe over eye.</p>
<p>Breeds, from southern British Columbia to southeastern Saskatchewan and northwestern North Dakota and south to northwestern Lower California and west central Texas. Winters in Mexico south to the Valley of Mexico. Accidental, in Minnesota and southern Mackenzie.</p>	<p>Three subspecies; the Common, the San Lucas and the San Clemente. The common house finch breeds from Oregon and Idaho through northern Wyoming and south through California and New Mexico, Lower California and Mexico to northern Chihuahua. May extend range east to western Kansas and western Texas.</p>	<p>Breeds, from southern Alberta to southwestern Manitoba and south to southeastern New Mexico and northwestern Texas and east to eastern Nebraska and west-central Minnesota. Winters, south from southern Texas and southern Arizona to Sonora and southern Lower California. Accidental, in New York, Massachusetts and South Carolina.</p>	<p>Two subspecies; the Eastern and the Western Lark Sparrows. Eastern, breeds from eastern Nebraska through western Minnesota to southern Ontario, to southern Louisiana, West Virginia and Maryland. Winters, southern Mississippi, southeastern Texas and eastern Mexico. Western, extends range to British Columbia and south to Guatemala.</p>	<p>Breeds, from northeastern Wyoming to southeastern Ontario and south to southern Texas and northern Georgia. Formerly it bred through to the Atlantic plain; now rare east of the Alleghenies. Winters, Guatemala to Colombia, Venezuela and Trinidad, migrating through Central America and Mexico.</p>
<p>Nests, usually near water in low bushes, among weeds, in willows, manzanitas and rose bushes. Nest made of plant fibers including bark, and often lined with hair or other fine materials. Eggs, 3 or 4, plain, bluish white or pale greenish blue, sometimes spotted.</p>	<p>Nests, in bird boxes, sagebrush, saltbush, mountain mahogany, cactus, tree cavities, buildings or on tree branches. Nest, shallow cup of grasses, hair, string and wool. Eggs, 3 to 6, bluish or greenish white, with spots, dots and blotches of black or brown near larger end; egg-weight, .08 ounces. Temperature, 106 degrees to 108 degrees F.</p>	<p>Nests, on ground, in open plains and prairies. Nest, often sunken in ground, made of grasses and lined with hair, plant down, or fine grasses. Eggs, 4 or 5, light greenish blue, rarely sprinkled with reddish brown spots. Egg-weight, .1 ounce. Incubation, by female. Annual broods, one or two. Male loses black after nesting season.</p>	<p>Nests, in open fields and prairie lands. Nest, on ground or in low bushes, made of grasses, and lined with fine rootlets or long hairs. Eggs, 3 to 5, white, pinkish, or grayish spotted, streaked and blotched with brown, black or purple; egg-weight, .1 ounce. Incubation, about 12 days, by female.</p>	<p>Nests, in fields and meadows as does the Meadowlark, and perches on nearby trees, posts or wires and sings as does the Meadowlark. Nest, on ground, among grasses or in low tree or shrub; made of grasses. Eggs, 3 to 5; greenish blue, .8 by .6 inch. Incubation, by female, 10 or 11 days. Probably, two annual broods.</p>
<p>Food; mostly weed seeds and noxious insects, the latter including alfalfa weevils and codlin moths. In habits, the bird reminds one of the Indigo Bunting found to the east of the Lazuli's range. The blue back of the male, flashing from the top of some weed or from the edge of a thicket, tempts one to seek the nest.</p>	<p>Food; 97%, vegetal, with less than 1% being grain. Common seeds eaten include; Russian thistle, dandelion, sunflower, mistletoe and, unfortunately, some cherries, mulberries and serviceberries. If serviceberries and mulberries are planted near cherry orchards, they may draw the house finches from the cherries. Song, ecstatic and worthwhile.</p>	<p>Food; largely seeds of weeds, grass and grain. Of its animal food, 78% is grasshoppers, though it includes also leaf-beetles and weevils. Of the seeds eaten, the important ones are Russian thistle, pigweed and amaranth, all prominent and pernicious in the range of the bunting.</p>	<p>Food; about half plant, and half animal matter, the animal matter including grasshoppers and locusts particularly in season, and the plant material made largely of weed seeds. Some grain is eaten as would be expected of such a large sparrow but much of the time after breeding season is spent in borders, not in open fields.</p>	<p>Food; mostly insects, weed seeds and a little grain. It is estimated that one family of Dickcissels eats 200 grasshoppers in one day and each grasshopper eats 1.5 times its own weight in plant material. The song, "Dick-dick-dick-cissel" is repeated again and again by the male during the nesting season.</p>
<p>It is no wonder that, within its range, the Lazuli Bunting is popular with those who love birds. It is surprising that this popularity has not found expression in its being considered as important enough to be a State Bird. It has more beauty than many birds so elected.</p>	<p>Essentially, the bird is useful as a weed seed destroyer, but also as a beautiful bird with a splendid song living in a place not always attractively populated. Its presence is considered by some as a good index of nearby water and in deserts, this may have a real significance to man's interests.</p>	<p>The bird does some harm to growing grains and may take some toll from harvested and waste crops but this is probably more than offset by the good done in destroying weed seeds and insects. This is the State Bird of Colorado.</p>	<p>An attractive sparrow, holding our attention because of the flashing white on the relatively long tail. In a sense, the bird seems something like a towhee that lives in the open. One never forgets the first nest he finds of a lark sparrow.</p>	<p>This bird means the Mid-West to the writer. It and the red-headed woodpecker populate Iowa's telephone poles clear across the State. It is estimated that the species saves the State of Illinois \$4,680 a day during the nesting season by the insects destroyed. Long may it live to maintain its record.</p>

(Continued from page 163) California woodpecker. Having read of this bird, and having seen it pictured long before I ever saw it alive, I was not so startled as I might otherwise have been to find it on a tree that seemed to have acorns imbedded in the side. The bird makes an easterner think of a combination flicker-red-head-sapsucker all thrown into one. It has some of the qualities of each of these woodpeckers but certainly differs greatly from each. One of the first motion pictures I ever took was made of one of these birds in the San Francisco Bay area. I blessed the bird because it posed so well. My experience before had been that as soon as I got ready for a bird picture, the bird had gone elsewhere. Not so the California woodpecker, who seems to wish to be sure that the easterner will take back a record with him.

Let us now be off to the woods to see what the West offers there. The jays seem to claim the spotlight whether you are in the National Parks crowded with other easterners, or in some peaceful out-of-the-way place. At Crater Lake, the jays almost demand that a visitor take their pictures. It is more likely that they are demanding that you buy some peanuts to feed them, but anyway they pester you. You buy the peanuts, and you are lucky if only one camera is not pointed at you while you feed them. The Clark's nutcracker, or Clark's crow, is the bird that haunts the Crater Lake hotel so persistently. The pinyon jay, Clark's nutcracker and the Canada jay all belong to the same family, as do the crows and ravens. The Canada jay extends its range much farther east than do the pinyon jay or the Clark's crow. In the lumber camps of Michigan and in eastern Canada, this bird is known as the camp-robbler, and the name is entirely appropriate. Most of the jays interest the tourist because of their loud calls and inquisitive ways. Some display beautiful colors, but in this respect they hardly rival the ordinary bluejay of the East. But to the resident westerner, jays are not always just noisy, inquiring, or comical birds. They may be downright nuisances. Worse than that, when a flock of them starts to get filled up on growing watermelons, the land owner is likely to use the same techniques for protection that he would like to use on humans who assume similar liberties. In spite of the reputation the jays have for intelligence, they are usually more easily frightened from fields of growing food by the use of scarecrows than are our crows.

I suppose that I should be a rational human being, and wish for the elimination of those kinds of wild life that may destroy the fruits of man's labor. I cannot, however, be so deliberately practical as to wish for the day when I can go across this continent and never see a jay, or for that matter not see *many* jays. I doubt if I will ever have to face this situation because the jays, like the crows, seem able to survive persecution. To be sure they hardly thrive on it, as do the crows, but they seem well able to take care of themselves. Perhaps Nature planned it that way for them.

The raven is of course another member of the crow family to be found in the West, sometimes in real abundance. You never forget the first one you see. Its tail is rounded at the tip when the bird is flying and the size is so much greater than that of the crow that you need never make a mistake.

I think it was Samuel Scoville, Jr., who once wrote that if you had a hunch that the bird you saw was a raven then it was a crow, because if it were a raven there would be no question about it in your mind. I am sure that Scoville's essay on his search for a raven's nest in Pennsylvania was one of the things which prepared me for my first raven. If you have not read it, do so.

But the ravens I have seen in the West are much different from those Scoville describes. Somehow, I associate them mostly with the cut-over part of the State of Washington, where snags and windfalls and devil's club make trout fishing almost an impossibility. You spend hours trying to get over, or through, or under a "jack-straw" pile of Douglas spruce logs while you drag along a camera, fish pole and pack basket. You look back along the trail you have come and figure that in a day or so you might be able to go another hundred yards or so if you have luck. Then, in a moment of despair, you look up. There sailing along serenely in the sky is this huge black bird. In a few seconds, he covers twice the territory you have covered in the last hour. You get so disgusted with your own ability to get about that if you had a gun you probably would shoot the raven just because you are so jealous of him.

When you get back home, comfortably bathed, shaved and rested, with a good dinner under your belt, you look back over the last day or so. Somehow, that raven sailing through the sky stands out as one of the bright spots of your trip. A crow, or a flock of blackbirds, could never have raised a similar response. Anyway, I can remember an experience such as this that I had the last time I was in Washington. And if you would ask me how many trout I caught that day or how big the biggest one was I could not tell you to save my soul. I have often wondered what that raven thought of me and what I was trying to do. I could see him turn his head and look down on me as he sailed by. I know what my opinion would have been of him if our positions had been reversed. For that matter I wonder always what the other fellow thinks of me.

I know that I, an easterner, get a great kick out of knowing western people and western birds. I only hope that they get half the same amount of pleasure from knowing me and knowing eastern birds. One thing is certain. As soon as the opportunity presents itself again I am off to renew my acquaintances in the West. And I will be looking for the first magpie in Nebraska, and the last dickcissel in the middle West, and the first of each of the other birds considered in this insert. They happen to be favorites of mine. I hope that they may be favorites of yours also.