

to be a fairly constant one, I have made use of it for several reasons. The main point of difference between the two notes is, not in the notes themselves so much as it is in the manner in which they are made use of by the birds. For instance the danger notes of the valley quail (*Lophortyx californicus vallicolus*) consist of an emphatic and very rapid repetition of several notes, the arrangement of the notes varying somewhat even with each bird

In the notes themselves there is nothing extraordinary, but their difference from common notes lies in their being used by the birds only on extreme occasions. From this point of view they can be called special notes. This will give an idea of their distinct nature and it seems reasonable, in studying both kinds of notes, to keep this distinction in mind, even if the difference is of an arbitrary kind.



### The Pinyon Jay.

THE pinyon jay (*Cyanocephalus cyanocephalus*) occurs liberally and is resident in this, the central part of Utah. You must not think that he is to be found everywhere, but should you have occasion to travel through the forests of cedar and pinyon pine you may find him in astonishing numbers. I have observed this jay more frequently in Cedar and Rush valleys than elsewhere; these valleys are perhaps 15 by 40 miles each in extent and for the most part are sagebrush deserts. Along their borders are patches or growths of scrub cedar, and in the hills surrounding them are plentiful numbers of the pinyon pine.

Some time ago I was watching a flock of Audubon warblers in one of the cedar forests when a flock of perhaps 100 pinyon jays suddenly came along, alighting all about me but hardly staying long enough to make mention of it. Then,

one after another, along they went, flying almost from tree to tree, each seemingly trying to outdo his companions in the matter of harsh, discordant notes.

In its nesting habits this jay is erratic. I have found a single nest with no others about, even after a diligent search; then again I know of a mountain mahogany fairly full of their nests, some nearly touching each other. I would classify their nesting as usually en colony. They nest preferably in some coniferous tree such as pinyon pine, scrub pine, scrub cedar or juniper, but may also be found in mountain mahogany and sometimes in brushy thickets. They are not beautiful birds, being somewhat between the ashy slate-blue of Woodhouse and the beautiful blue of the black-headed variety,—yet as you see them restless and roving, going through a cedar patch, they offer a kindly contrast to the otherwise quiet and peaceful locality.

Their habits are very similar to Clarke crow, as is doubtless also their food, and I have usually found both birds in the same localities except in breeding season when Clarke crow seeks loftier altitudes and earlier months in which to propagate its kind. The eggs of both species are somewhat similar and might be confused in certain cases. The pinyon jay is also called "camp robber" along with the Clarke crow and I have often been led astray when hunting for the rare eggs of the latter, because of the former bird being meant by my kindly-disposed friends. The pinyon jay will often hop right into your camp where he finds crumbs, and he does not always draw the line at certain light articles convenient to the table and comfort of the campers. This kleptomania seems common to the nature of the Canada and pinyon jays, as well as to the Clarke nutcracker.

H. C. JOHNSON.

*American Fork, Utah.*