



by Jack Clinton-Eitnrear
San Antonio, Texas

Mexican Crows

According to Edwards' "Guide to Finding Birds in Mexico" all one must do to observe nesting Mexican crows, *Corvus imparatus*, is to drive 290 miles south of Brownsville, Texas to the city of Mante. At the "southern edge of Mante, turn east on highway 80 towards Tampico and proceed until you reach a big steel-framed bridge, over the Rio Guayalejo, about 17 miles from the road junction." During the latter part of summer Mexican crows nest in the bridge framework. Having made numerous trips into northeastern Mexico I was very much familiar with their resident crow. Inhabiting disturbed areas from northern Tamaulipas (once in a while it is observed in the Brownsville, Texas dump) and west into Nuevo Leon and San Luis Potosi, the crow's range extends south only partially into the state of Veracruz. Although it has a rather restricted range, the species is frequently observed along highways and in villages. For a number of years, during the crow's breeding season, I have attempted to locate a nest. Lone birds carrying sticks and affectionate pairs vocalizing and allopreening from scrubs have always seemed to be able to keep the location of their nests a secret. Finally, during July of 1984, I decided to give Edwards' advice a chance.

Crows belong to the taxonomic family Corvidae, a rather large group composed of 25 Genera and over 100 species. What we would consider a "typical" crow are those in the genus *Corvus*. Structural and behavioral differences generally are considered of greater importance than appearance as many are very similar in coloration. In

the United States the common crow, *Corvus brachyrhynchos*, is the most widely known, occurring in various forms (generally considered to be four subspecies) everywhere except in the northwest and southern portions of the southwest. In addition, we have the Northwestern crow, *C. caurinus*, the fish crow, *C. ossifragus*, and two ravens; white-necked, *C. cryptoleucus*, and the common raven, *C. corax*. South of the border the various ravens continue to be observed (although the white-necked is only found south to about Guanajuato) in more undisturbed areas often at higher elevations. The common crow of the United States is replaced on the northeastern portion of Mexico with the Mexican crow, *C. imparatus*, and on the western slope by the Sinaloan crow, *C. sinaloae*. Except for the common raven, which ranges into Nicaragua, no crow or raven is found in mainland Central and South America.

In his popular and authoritative book on the "Crows of the World" the author, Derek Goodwin, treats both Mexican crows as separate species because they "appear to show an early, but probably most important, stage of divergence." Most authors, however, such as Wilmore's "Crows, Jays, Ravens" and Peterson and Chalif's "A Field Guide to Mexican Birds" treat the two as one species. The most scientific analysis of the situation was done by

David W. Johnston and published in his book "The Biosystematics of American Crows." In his book Johnston reviews the argument presented by Irby Davis; due to differences in vocalizations and size, separate species status should be granted. After all the facts are in the conclusion was that, in fact, adult male crows from western Mexico do have statistically significantly smaller wing/tail ratios than comparable forms from eastern Mexico. Johnston also confirms the notion that the vocalizations of the two forms are different. Despite this, he concluded, "from the present investigation of their characteristics-morphology, habits and voice it does not seem that they have yet reached the level of divergence attributed to bona fide species." It would appear that in consideration of this we have a "species in the making." The current taxonomic thought on the matter is that the western form be represented as *Corvus imparatus sinaloae* and the northeastern one, *C. imparatus imparatus*.

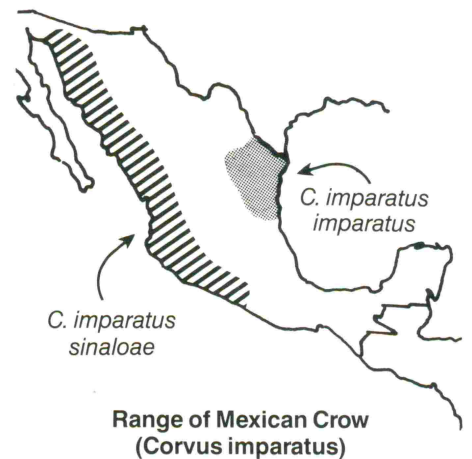
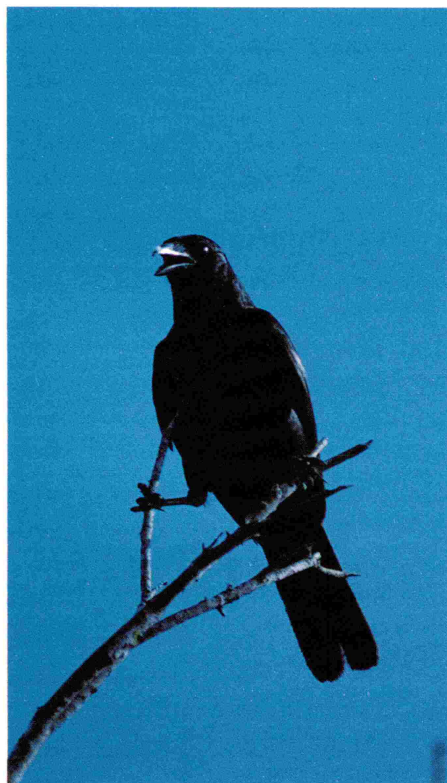


Photo by Jack Clinton-Eitnrear



Adult perched in treetop.

In terms of conservation and aviculture species versus subspecies differentiation is of varying importance. With limited funds for conservation efforts, the species approach (if not a total ecosystem approach) is most frequently taken. Except in rare situations specific action will not be taken specifically for subspecies preservation especially if the species, in total, is not endangered. In the eyes of conservationists being labeled a species is of great importance. In aviculture more attention is often given to subspecies than species. The various parrots in the genus *Amazona*, for example, often have numerous subspecies of strikingly different coloration. The various subspecies of *Amazona ochrocephala* are often thought, by the novice aviculturist, to

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be separate species. The *captive* survival of a species is therefore greatly enhanced if it is wide ranging with several subspecies that differ in coloration. It is therefore doubtful that much effort will be made to improve the Central American population of the scarlet macaw since the species is doing fairly well in Amazonia. If we could make the Central American population a separate species or, at least, change its coloration its future survival would be greatly enhanced.

Now back to *Corvus*. Where do the various crow species and subspecies fit into this? Unfortunately, not only do the various subspecies of crows differ little (in terms of coloration) but most species are usually quite similar as well. Since most of us want something exotic and colorful it is not surprising that few aviculturists have worked with crows. This is not to say that we have not had experience with them. As Sheldon Dingle said, "I raise a good, healthy flock of crows every year. . . in my back yard!" So with over 9000 species of birds to work with (in theory anyway) why should we work with crows? For a number of reasons! Since you can often observe a species of crow in your back yard they would be a good species to develop avicultural "experience" with. Crows from all over the world exhibit behavioral traits similar to the one in your back yard. Finally, and most importantly, if aviculture is to be included in species survival strategies then we must develop the techniques needed to maintain and propagate them. To my knowledge, no species of *Corvus* is consistently bred by anyone in the United States. We are, however, currently faced with the development of a captive breeding program on both the Hawaiian, *C. tropicus*, and Guam, *C. kubaryi*, crows. At least six other species occur on islands that tend to be prone to drastic rapid habitat alterations as well as frequent problems with the introduction of exotic species and excessive human shooting. If aviculture is to make a lasting contribution to bird conservation, private aviculturists will have to expand their interest from the frequently maintained colorful species to include some less colorful, possibly more aviculturally challenging ones. If the techniques are not developed for species care and propagation then it is doubtful that aviculture can be realistically considered in the species' conservation strategy. If it is attempted, it is often a sad, last ditch effort. Having to develop avicultural techniques with *endangered* species is a tense and often

For information about contacting any of these member clubs, please call that club's closest state coordinator. There is a state coordinator listing with phone numbers elsewhere in this publication.



tragic event.

After passing hundreds of Mexican crows, while en route to Mante, we finally arrived at the highway junction and turned towards Tampico. Soon within view was the bridge over the Rio Guayalejo. We pulled our Jeep off the roadway and started walking down the bridge. Soon dark shadows appeared and unmusical cow-rah, cow-rah's filled the air. Within only a few minutes we located over a dozen nests lodged in the steel bridge frame.

Crows in general start breeding in their third year, thus large flocks of sub-adults can often be observed during the breeding season. Being omnivorous they eat a large number of insects as well as carrion and vegetative matter. While being generally quite social, during the breeding season they often become territorial, with the amount of territoriality depending upon the species. The common raven appears to be very territorial but Mexican crows nested within ten feet of one another. I noted no aggression between the various pairs observed, for several hours, on the bridge. Both sexes generally build the nest and the male feeds the female while she incubates. Both sexes feed the young which often remain in the nest 30-35 days and consume their weight in food daily. With a 60-70 percent mortality rate often only one in the 3-4 egg clutch survive until the following year. It is interesting to note that island species often lay fewer eggs, a population stabilizing method no doubt. Being monogamous they usually return to the same area the following year to begin the cycle with the male's bowing to the female with wings spread and tail fanned.

In the first ark, Noah maintained a raven which was later released to determine if the waters were subsiding. If we are to build an effective avicultural "ark" we, too, cannot only collect parrots, pigeons and peafowl but also must not forget the raven or possibly a pair of Mexican crows.

Further Reading

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