

Identification of Chihuahuan Raven and its Status North of Mexico

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The separation of Chihuahuan and Common Raven has long been recognized as a significant identification challenge. Both species are entirely black, with very similar structure and voice. Known field marks all involve **subtle and subjective differences, and in every one of these, there is overlap between the two species.** In the absence of any truly diagnostic features, we tend to fall back on whatever subjective impression confirms our expectations, and many ravens are presumptively “identified” according to the conventional wisdom of the area.

In my recent investigations, I have discovered clear and diagnostic differences in head shape that, with good views, allow more confident identification of these species. With this new information, a review of photographs currently available in the Macaulay Library reveals a scale of misidentification and confusion, and **resulting uncertainty about status, that is without parallel in modern North American birding. A substantial percentage of the alleged Chihuahuan Ravens photographed north of southern Texas are actually Common Ravens.**

I don't mean to imply any disrespect to the observers. We have all been using the best information available to identify ravens, and it simply wasn't effective. There were no known features that could be used to convincingly confirm or refute an identification. For decades, many people have raised questions about the identification of ravens, but with no diagnostic features, there could be no substantive debate about individual birds. I suspect that another reason this misidentification became so pervasive is that **in most places where Chihuahuan Raven occurs, the conventional wisdom says both species are expected,** so there is little consequence for any misidentification, and little incentive for critical review.

Typical individuals of the two species, showing the most distinctive differences in head shape and nasal bristle length, as well as more subtle differences in overall size, bill shape, and throat “shaginess”.



Common Raven



Chihuahuan Raven

Methods

This study developed gradually over many years, most recently studying specimens at Harvard's Museum of Comparative Zoology, then live birds in New Mexico, and finally, the large collection of photos in the Macaulay Library. During this recent study of specimens, I noticed what seemed to be longer nape feathers on the Chihuahuan Raven specimens. This led me to look for differences in head shape in the field, but I struggled to confirm the identity of individual ravens, and I returned with only vague impressions. (I know now that most of my encounters were with Common Ravens.)

That led me to the photo collection to test my head-shape hypothesis. I started by filtering the Macaulay Library photos to show birds from southern Texas, where only Chihuahuan Raven should occur. Looking at a series of photos of known Chihuahuan Ravens revealed a consistent head shape. Then, looking at a series of photos of known Common Ravens from outside the range of Chihuahuan confirmed clear differences in head shape.

Once I had a good sense of the differences, I started looking at photos from areas where both species occur, and by **combining head shape with nasal bristle length and sometimes feather base color**, I felt I was able to identify many photos with full confidence. The results for each state are described below.

It is important to stress that this effort was an informal review. I am confident that head shape is a useful and objective feature to distinguish these species, but this is an early step in the process. I have not had a chance to test these head shape differences in the field, only in photos. Real-world testing and experience is now needed to understand variation in and limitations of this field mark.

Many photos show head shapes that are ambiguous, either lacking enough detail or showing birds at unhelpful angles or odd poses. I left many photos unidentified and did not keep a detailed record of the identification of each photo. I simply tallied those that I could identify with reasonable confidence as I scrolled through the collection. My intent was to get a sense of the proportion of photos correctly identified as Chihuahuan Raven,

and I believe that my informal survey accomplished that. Interestingly, while many photos identified as Chihuahuan Raven are actually Common Raven, I did not find any examples of the reverse: photos entered as Common Raven (or “raven sp.”) that are actually Chihuahuan Raven.

The fundamental point of this paper is that head shape finally allows confident identification of ravens, and a large proportion of reported Chihuahuan Ravens are actually Common Ravens. The challenge for observers now is refining the identification criteria and figuring out the actual status of Chihuahuan Raven across its range. That will take a lot of careful field work and will undoubtedly lead to more discoveries.

Morphology

Head shape

Both species have long head feathers that can be raised and lowered to produce a wide range of head shapes, but the relative lengths of feathers differ and produce noticeably different shapes in each species. In short, Chihuahuan has relatively long feathers toward the back of the crown, producing a peak on the rear crown, while Common has relatively long feathers toward the front of the crown, producing a peak on the mid-crown.

As a result, Common Raven frequently shows a tall peak in the middle of the crown, above a point just behind the eye, that then slopes sharply down from there to the nape. The profile on the rear crown can even be slightly concave (or indented) between this mid-crown peak and the nape. Chihuahuan Raven, in contrast, frequently shows a relatively low and flat crown extending back to a distinct angle at the back of the crown, sloping down to the nape. The overall appearance of the head of Chihuahuan Raven is a blocky horizontal oval, slightly taller at the rear, and the head often appears proportionally large, while the head of Common Raven is often a tall, peaked, A-shape and can appear proportionally small.

To assess head shape properly, you need a view of a perched bird from the side. Differences are not apparent in flight, and views from the front, from behind, or from below, all produce different profile shapes that are not useful for identification. Some of these can suggest the distinctive shapes seen in the side view, but are not the same and should not be used for identification. Head shape changes frequently as feathers are raised and lowered, and some shapes are very similar between the two species. Individual photographs can be misleading and difficult to identify, but extended observation or a series of photos should reveal the distinctive head shape of each species.

Experience is the key to confident identification based on head shape, and extended observation of birds of known identity is the best way to gain experience. Take the time to watch a bird, even after it has been identified, pay special attention to its appearance in the direct side-view profile, and take note of changes in head shape. This will help you to develop a sense of the “average” shape and to refine your understanding of the range of possible shapes for each species.

When trying to identify an unknown raven, watch as it turns its head and moves its feathers. Again, focus on the profile in a direct side view. Try to confirm the shape multiple times as the bird moves during an extended observation. This will increase confidence that you are seeing the “true” head shape and not a momentary anomaly—in the same way a series of photos, especially of the side view profile, will allow more confident identification than a single photo or photos from other angles.

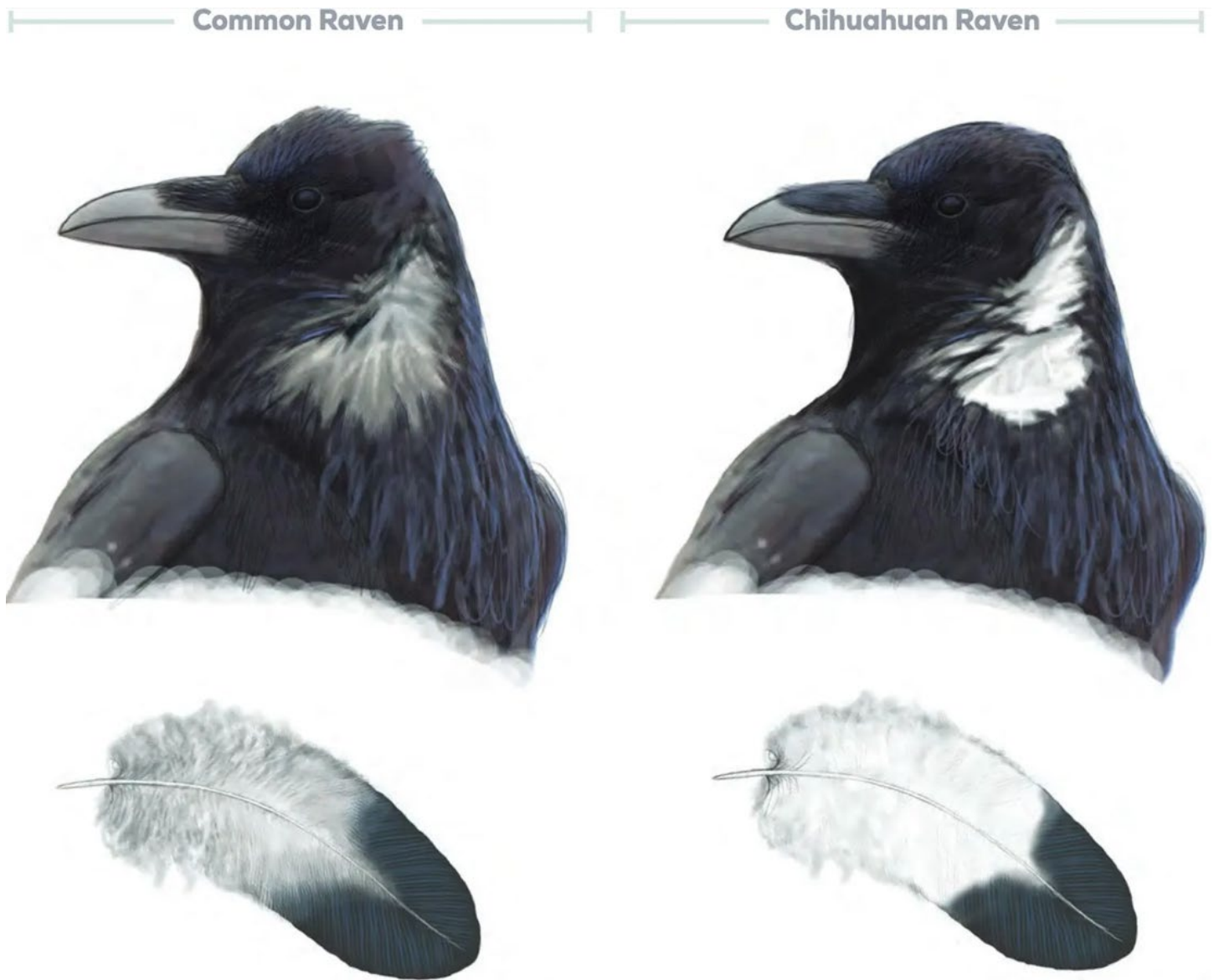
Pale bases of body feathers

Both species have pale bases on the body feathers, and the bright white feather bases on Chihuahuan Raven are responsible for that species’ former English name of White-necked Raven. These are normally concealed by the overlapping black tips of the feathers, but when feathers are disturbed (e.g. by wind or preening) the bases show as an obvious pale patch, most often on the neck and/or breast, but any of the feathers can reveal pale bases. Even the bases of the primary shafts are paler on Chihuahuan Raven than on Common, but they are completely hidden.

On Common Raven, the basal parts of body feathers are pale gray, and on Chihuahuan Raven, the color is bright white. While this seems like a straightforward difference, the vagaries of shadow and sunlight, camera

settings, and brief glimpses of the color as the bird moves around, make it **easy to misinterpret in practice**. For example, the pale feather bases of Common Raven can appear to contrast strongly with the black surrounding feathers in bright lighting, and the bright white of Chihuahuan Raven can be dulled by shadow.

One other detail is worth looking for in close views or in photos: **On Common Raven, the pale centers of the feathers blend gradually to black tips, and the pale color extends to a point along the shaft. This forms a more jagged and blurry border to the pale area.** **On Chihuahuan Raven, the white bases contrast abruptly with black tips, and the pale color tends to end in a straighter line across the feather, not extending much along the shaft.** This results in a more contrasting and straighter-edged border to the exposed pale patch. There does seem to be some variation in this feature. Most of the variation can be attributed to lighting and contrast effects and the processing of photos, but some could also be individual variation.

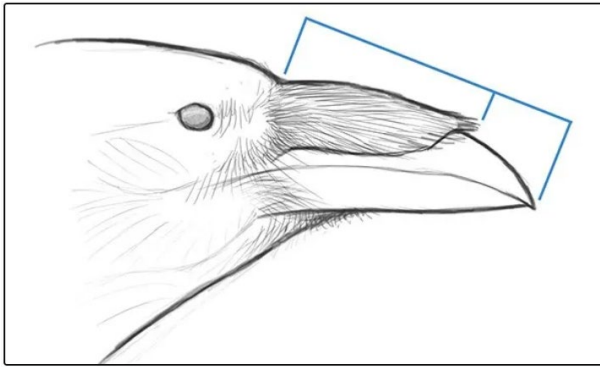


Nasal bristles

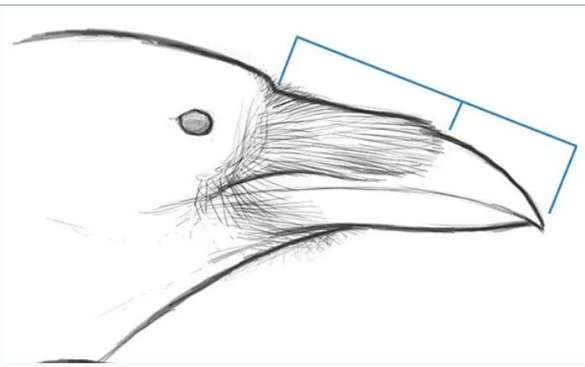
On Chihuahuan Raven, the nasal bristles are relatively longer, typically covering about two-thirds of the bill, while Common averages around one-half of the bill covered. There is variation and considerable overlap, as documented by Pieplow and Spencer (2019), but this is still a useful feature, especially in combination with head shape. It requires very good views to accurately assess the length of the nasal bristles, and distinguishing 50% from 60% in the field is challenging. The answer will always be a probability.

Pieplow and Spencer found that nearly three-fourths of all Chihuahuan Ravens had bristles covering 60% of the bill or more, and almost no Common Ravens had bristles that long (only 2 out of 113). So, any raven with 60% or more of the bill covered by the nasal bristles is almost certainly a Chihuahuan. Ravens with bristles covering about half of the bill are about 3:1 Common to Chihuahuan. Ravens with much less than half of the bill covered by nasal bristles are almost all Common.

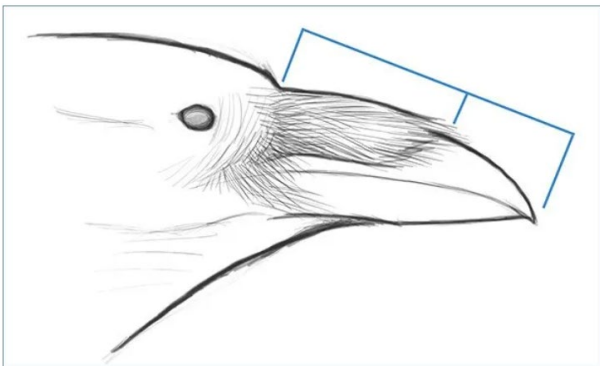
One of the difficulties of assessing the length of nasal bristles is that the tips of the bristles are fine and can be difficult to see even at close range. Another issue is that the bristles are longest when freshly molted and become shorter as the tips wear away. In extreme cases, this is a useful field mark, but it should be assessed cautiously.



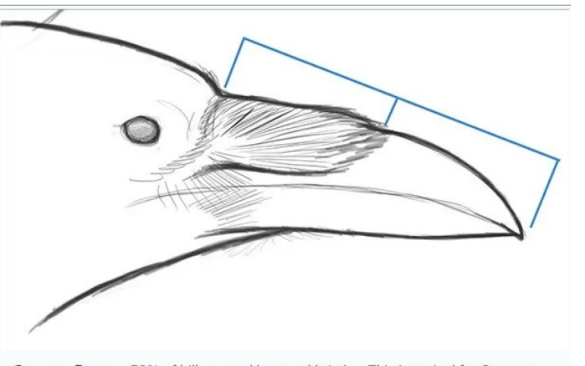
Chihuahuan Raven – 70% of bill covered by nasal bristles. Birds like this are beyond the range of Common and are safely identified.



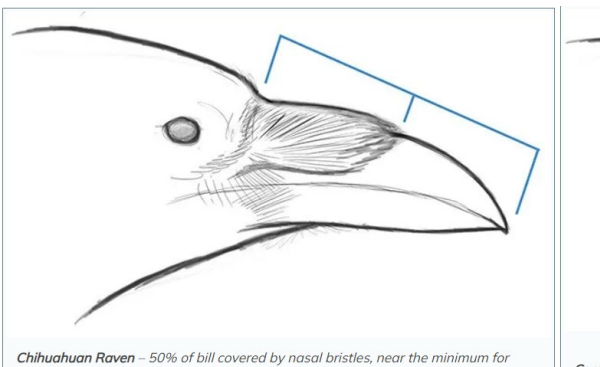
Common Raven – 60% of bill covered by nasal bristles. This is the maximum for Common Raven. Virtually all Commons, and about 1/3 of Chihuahuans, have bristles shorter than this.



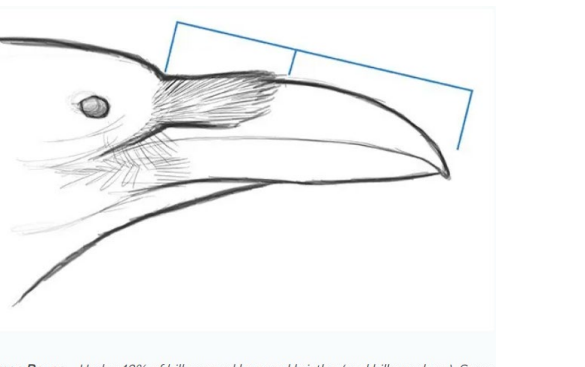
Chihuahuan Raven – 60% of bill covered by nasal bristles. About two-thirds of Chihuahuan Ravens have nasal bristles this long or longer, but only a few Commons have bristles this long.



Common Raven – 50% of bill covered by nasal bristles. This is typical for Common Raven. A small percentage of Chihuahuan match this nasal bristle extent, but with the bill shorter overall.



Chihuahuan Raven – 50% of bill covered by nasal bristles, near the minimum for Chihuahuan. About one-third of Chihuahuan Ravens have nasal bristles shorter than 60% of the bill, overlapping with Common



Common Raven – Under 40% of bill covered by nasal bristles (and bill very long). Some Common Ravens have nasal bristles this short, and are safely identified.

Bill shape

The bill of Chihuahuan Raven is typically short and relatively stout, and this impression is accentuated by the long nasal bristles that tend to arch above the culmen, making the bill seem even thicker. Some short-billed Common Ravens overlap with longer-billed Chihuahuan, but the longer-billed Commons are distinctive, and never matched by any Chihuahuan.

Overall size

Chihuahuan Raven is smaller overall, and the difference can be obvious in direct comparison, but both species are variable, and there is overlap in all measurements. Note that the largest subspecies of Common Raven occur in the north, and the smallest in the southwest alongside Chihuahuan Raven, so an observer very familiar with Common Raven in, say, Alaska or Ontario, might be struck by the small size of the Common Ravens they see in the southwest.

If you see small and large ravens together, it is worth studying the smaller ones as potential (not definite) Chihuahuan. If you see a lone raven that seems small, you should look for other field marks and give very little credence to the impression of size.

Throat shagginess

Both species have elongated ornamental throat feathers with glossy blue margins. These feathers are bigger, longer, and glossier on Common Raven, and the whole throat often looks conspicuously puffy or shaggy. On Chihuahuan Raven, these feathers are much less obvious in general and are shorter and less colorful. There is variation and overlap in the length of these feathers, and immatures of both species have less showy throat feathers than adults, so it is not a very useful field mark, although on the most showy birds it could be a point in favor of Common.

My impression from field observations and photo study is that Common tends to display its throat feathers more, so postures in which the throat feathers are flared and expanded are both more frequent and more eye-catching in Common Ravens.

Head color

Both species have essentially black heads, but at close range and in good light, slight differences might be apparent. Chihuahuan averages a slightly more matte brownish or maroon color on the sides and back of the head. In Common, the entire head is more blackish with faint blue sheen. Note that juveniles of both species have browner and less glossy plumage overall.

Wing/tail ratio

There seems to be no consistent difference between the two species, and considerable variation, in the relative lengths of wingtips and tail tip. The tips of the folded wings usually reach roughly to the end of the tail, but can extend well beyond the tail tip, or fall well short of it, in both species.

Identification in flight

Identification of ravens by shape and proportions in flight is generally not reliable, because the differences are too subtle and subjective, and the birds are too variable. The shape and proportions of wings, tail, head and bill are different on average (along with overall size), and if the two species are flying together, the differences might be obvious. In general, however, we see ravens individually, and the differences that can be attributed to flight style, viewing angle, distance, etc., outweigh any differences between the species.

That said, Chihuahuan Raven is smaller and generally looks a bit less lanky in all directions, with relatively broad wings, tapering more from broad "arm" (secondaries) to narrower "hand" (vs. more even-width), the tail averages slightly more rounded (less strongly wedge-shaped), the bill averages a little shorter and relatively thicker, and the head projection can look shorter. All of this is subjective and variable. Wing shape and

proportions (and the resulting impression of head and tail proportions) changes depending on flight style and wind conditions. The actual length and shape of wings and tail varies with age and possibly sex. Adult Common Ravens have the most wedge-shaped tails; immature Common Ravens have more rounded tails and are more similar to Chihuahuan Ravens. In other words, even if an individual raven stands out from its flock-mates, it might still be the same species.

Natural History

Voice

Separating these two species by voice is fraught with challenges. Differences in voice were described by Pieplow (2014), who emphasized the consistent sound of Chihuahuan Raven calls in contrast to the varied sounds given by Common Raven. He suggested that voice might be the best field character for separating these two species, but acknowledged that some individual calls sound very similar. Since then, little has been added to our understanding of identifying these species by call.

As with photographs, understanding the variation in the two species' voices is hindered by our inability to verify the identification of most available audio recordings (many of which seem to be misidentified). The full range of variation in Chihuahuan Raven calls is still unknown because of a shortage of reliably identified recordings.

The typical vocalization of Chihuahuan Raven is a very consistent, slightly nasal, "quack", which usually sounds slightly rising. A series of calls from an individual, or the chorus of calls of a flock, generally sound more or less the same with little variation.

The typical call given by Common Raven in traveling flight is similar, but usually sounds monotone or downslurred (but can sound upslurred) and often has a more resonant (less nasal) and "fuller" or "throaty" sound: "braank". Common Raven makes a wide variety of sounds, both higher and lower pitched than Chihuahuan, and if you hear a variety of calls in sequence, it is most likely Common Raven. At other times, they can give the same call repeatedly, like Chihuahuan, and some calls sound essentially identical to Chihuahuan.

As Pieplow (2014) points out, using pitch as a distinguishing feature is only helpful to identify Common Raven, as that species gives calls both higher and lower than the typical range of Chihuahuan Raven. Many calls of Common are outside the range of Chihuahuan and might be safely identifiable, but no call of Chihuahuan Raven is outside the range of Common. Another pitfall of using pitch for identification involves the calls of fledglings, which can be strikingly higher-pitched than adult calls for many weeks after fledging in both species.

The spectrograms shown here illustrate some of the details that differ between the two species:

In both species, the variations shown as A and B are typical—with differences that are relatively easy to hear—and these are probably identifiable with some confidence.

Example C of both species are more similar, and are extremely difficult to distinguish by ear.

Chihuahuan Raven example C is based on this recording from southern Texas:

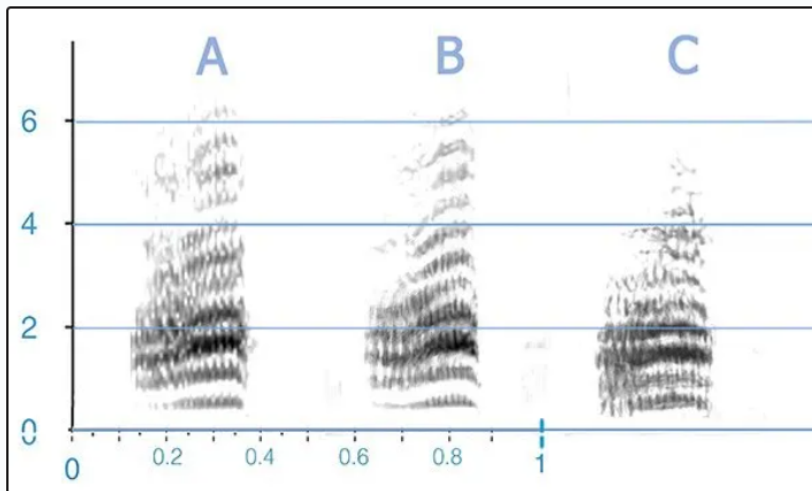
<https://macaulaylibrary.org/asset/45046>

Common Raven example C is based on this recording from California: <https://xeno-canto.org/138702>

Example X, shown here under Common Raven, is a short, level call that is probably within the repertoire of both species and might be impossible to identify. It is based on several recordings including this one:

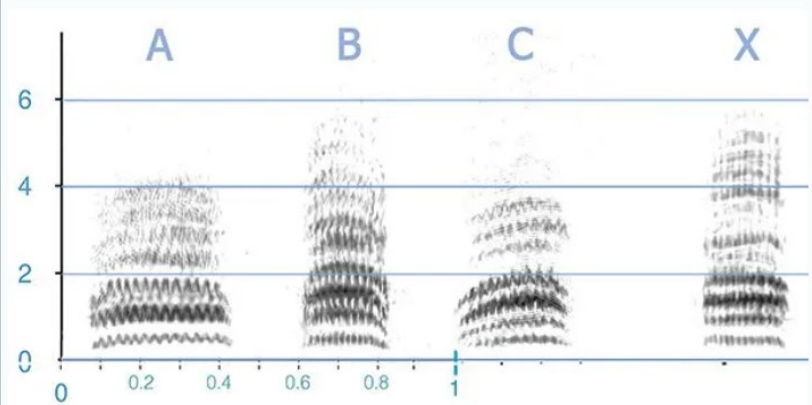
<https://macaulaylibrary.org/asset/192430611>, which was identified in the field as Chihuahuan.

Chihuahuan Raven



- Usually sounds upslurred
- Spectrogram usually shows slight S shape, faintly two-parted, with the second part slightly higher and louder and the partials (dark bands) a little better defined
- Strongest partials often 3rd and 4th from bottom
- Some strong partials usually above 2 kHz
- Typically short duration about 0.25 secs
- Averages faster modulation, can sound more grating

Common Raven



- Usually sounds level, can sound upslurred or downslurred
- Spectrogram level to overslurred (slightly or strongly), with little change in strength or pitch, not two-parted (but another variation of Common Raven is strongly two-parted)
- Strongest partials usually 2nd and 3rd
- Strong partials mostly below 2 kHz
- Can be long duration up to 0.4 secs
- Averages slower modulation, can sound more croaking or rolling

These are idealized sketches of spectrograms, to reduce variables and make images more comparable.

Fledglings

Young ravens, like other passerines, leave the nest while they are still dependent on their parents. Young fledglings are easily recognized by their short wings and tail, traces of pinkish or whitish color around the base of the bill, high-pitched voice, etc. Their bill and nasal bristles are also not fully grown at this stage. Given all of this, it is not possible to identify birds to species at this stage. Identifying the attending adults is currently the best way to identify the fledglings. Within a few weeks, these birds become more adult-like overall, but can still retain some of the features of fledglings (e.g. short bill), which can suggest Chihuahuan Raven. It is important to keep this pitfall in mind and be alert to the possibility of young birds from about May through August.

Timing of nesting

It is possible that Chihuahuan Raven nesting season averages a few weeks later than Common. Common Ravens in the southwest often fledge from mid-May to late June, while fledgling Chihuahuan Ravens often appear later: mid-July to early August.

The combined duration of incubation and nestling stages is about 50 days in both species, so eggs laid in late March lead to fledging in mid-May, eggs laid in early-mid May lead to fledging at the beginning of July, and eggs laid in early-mid June lead to fledging in early August.

Dwyer et al (2020) suggest that laying in Chihuahuan Raven occurs earlier (early May, with fledging early July) in New Mexico during years when grasshoppers are most conspicuous, but that it is mostly delayed until June (fledging in early August) in years when grasshoppers are not seen.

A difference in nest timing could also lead to a difference in molt timing, which deserves study.

Habitat

The conventional wisdom is that Chihuahuan Raven is a bird of arid grasslands, and Common Raven is a bird of the mountains. While this is generally true, it is nearly useless for identification. Both species are adaptable and mobile, and can occur in any habitat. Chihuahuan Raven does tend to avoid mountainous terrain, but Common goes everywhere and is regularly seen even in featureless prairie.

Nest site selection

It has been suggested that the two species tend to choose different nest sites: Chihuahuan on trees, windmills, power poles, etc., and Common on cliffs. Unfortunately, this is not a constant distinction, and Common Raven, in particular, will use any of those potential nest sites. There may be a slight difference in frequency, and there are apparently no records of a Chihuahuan Raven nest on a cliff, but any tendency probably has more to do with the availability of nest sites in each species's normal range rather than any real preference for nest sites. It seems likely that if Chihuahuan Ravens had access to a cliff ledge, they could nest there. Future study of carefully identified nesting ravens might reveal some differences, but for now, nest site choice should not be given any weight in identification.

Flocking behavior

The conventional wisdom is that Chihuahuan Raven often travels in flocks, and Common Raven in pairs or family groups of up to six or so. As with habitat preference, there is some truth to this statement, but it is essentially useless for identification. Chihuahuan Raven tends to be more gregarious than Common and is often seen in large groups, foraging in farmland or flying to or from communal roosts. But Chihuahuan Raven also often travels in pairs or small groups, and Common Raven often forms large groups of even several hundred birds.

Some reports of birds identified as Chihuahuan Raven seem to be based primarily on the fact that the birds were in a large group in an area where such groups are unusual. The pitfall is that nonbreeding immature Common Ravens form groups and wander widely in search of food, so the sudden appearance of a flock of ravens overhead does not point to Chihuahuan.

The hybrid question

The possibility of hybridization is often invoked when dealing with confusing individuals of two similar species, and the potential for hybridization certainly exists between Common and Chihuahuan ravens. However, genetic studies (Kearns et al 2018) have found no evidence of interbreeding, and our assumption should be that hybridization is not occurring. Seemingly intermediate birds with mixed characters are almost certainly the result of variation and/or misleading photographs, and not of hybridization.

Range and Status

The following summaries by state are meant to highlight some of the questions about status, based primarily on my informal review of photos available online in the Macaulay Library. There are many limitations and biases inherent in this kind of review; for example, one reviewer suggested that Chihuahuan Raven is more wary and therefore more difficult to photograph. Additional valid records undoubtedly exist in personal archives, in other publications, and in museums. A more exhaustive review and careful field work in each state is needed to clarify the status of Chihuahuan Raven.

Colorado ■ Common Raven is found throughout the state, but the status of Chihuahuan Raven in Colorado has been the subject of decades of debate. Pieplow (2014) summarized: “Conventional wisdom says the ones on the southeastern plains are Chihuahuans, and the rest are Commons. But ... Some believe that Chihuahuan Ravens are not only the default raven in the southeast, but also regular wanderers north to the Wyoming border. Others maintain that to find a real Chihuahuan Raven, you have to go south of Colorado altogether.”

A year later Leukering (2015) questioned whether field identification was even possible, and suggested that most Colorado reports are identified based simply on location “...ravens on the plains in summer are identified as Chihuahuans and those in the mountains and foothills as Commons.” He called for a more critical approach and more caution in identifying ravens.

Now, nearly 10 years later, little has changed. The view accepted in eBird is that Chihuahuan Raven occurs regularly throughout the entire southeastern quadrant of Colorado. To support this view, some contrary evidence must be ignored. For example Leukering (2015) points out that “most ravens assumed to be Chihuahuans in Colorado seem to lack the excessive nasal bristles typical of the species in the core of its range.”

Given conflicting evidence, and because all of the known field marks are subjective, it is easy to maintain the conventional wisdom by discounting some evidence (nasal bristles) and giving more weight to other evidence (location and habitat).

Reviewing the available photos in the Macaulay Library and considering head shape reveals pervasive misidentification.

Among about 100 Colorado reports of Chihuahuan Raven documented with photographs, about 50 can be identified as Common Raven, while only about 10 show definite Chihuahuan Raven. The other 40 reports show birds in flight, or distant, or at unhelpful angles. Some of those could be Chihuahuan Raven as well, but presumably at roughly the same proportion as in the rest of the sample. Similarly, among 97 photos entered as Raven sp., many can be identified as Common, none as Chihuahuan.

This means that the actual number of Chihuahuan Ravens in Colorado could be less than 20% of the number implied by reports in eBird. The good news is that the species does occur in the southeastern part of the state, across several counties, but it is far less frequent than the conventional wisdom suggests, and its status desperately needs clarification.

Records that are considered acceptable as Chihuahuan include several in Kiowa Co, (including family groups), a few in Otero and Prowers Cos, all in the far southeast. Records farther west that are possibly Chihuahuan (although not fully convincing) include one each in El Paso and Custer Cos.

New Mexico ■ Both species of ravens occur widely in New Mexico; Common Raven essentially throughout, and Chihuahuan Raven locally. A review of photos available in the Macaulay Library from New Mexico also reveals a high frequency of misidentification. Among roughly 180 reports of Chihuahuan Raven that include identifiable photographs, slightly over half (95 reports) show Common Raven instead.

Chihuahuan Raven is locally common along the Rio Grande and across the southern part of the state, but I found no identifiable photos from the northeastern quadrant (northernmost photos from Santa Fe, Guadalupe, DeBaca, and Roosevelt Cos). The species almost certainly occurs there, but needs documentation. There are no reports from the northwestern part of the state.

Curiously, I found only a few definite photos of Chihuahuan Raven from Bosque del Apache NWR, Socorro County. That site receives a disproportionate amount of birder coverage and bird photography, and many Common Raven photos have been taken there, but Chihuahuan Raven seems to be quite rare on the refuge drive.

Arizona ■ Chihuahuan Raven is a fairly common but local resident in the southeastern corner. Common Raven occurs throughout the state, including lowlands and grasslands. As in other states, many of the photos identified as Chihuahuan Raven actually show Common Raven, but in Arizona this does not affect the overall range and status of the species. The distribution mapped in eBird is supported by verifiable photos, and there are no reports outside of the confirmed range.

Undocumented eBird reports from northwestern Sonora, including some just south of the Arizona border at Organ Pipe Cactus NM, are well west of other records in Arizona and need verification. A specimen from Pine, Gila Co in Jun 1967 (Monson and Phillips 1981) is almost 100 miles (160 km) northwest of the present range recorded in eBird. It is not clear whether this represents a lone vagrant or a more widespread population at that time.

Texas ■ Status complex. Both species of ravens occur widely across the western two-thirds of the state, in locally differing proportions. As elsewhere, some of the photographs reported as Chihuahuan Raven in fact show Common Raven, but in most areas, there are not enough verifiable photos to make any statements about the relative status of the two species. A few areas deserve special mention:

Common Raven is nearly unreported from a large swath of western Texas from Midland/Odessa west to El Paso and north to Lubbock, also including the southeastern corner of New Mexico. Chihuahuan is reported frequently in this same area. This gap seems improbable, and in fact, the relatively few photo records from the area do show some definite Common Ravens. The relative frequency of the two species in this area is almost certainly not as different as current reports suggest, but this needs to be confirmed.

In the eastern Panhandle and the area northwest of Dallas-Fort Worth, including southwestern Oklahoma (the Rolling Plains region), only Chihuahuan is reported, but a review of the few photos from the area shows definite records of Common and none of Chihuahuan. All of the easternmost records seem more likely to be Common (see Oklahoma discussion).

Common Raven is the expected species in the Edwards Plateau, where Chihuahuan Raven is reported infrequently, and the photographs available in the Macaulay Library support this. I could not find an identifiable Chihuahuan Raven from the Edwards Plateau, with the exception of this likely flock of Chihuahuan Ravens at Enchanted Rock SNA, Llano Co in Nov 2023 <https://ebird.org/checklist/S155510745>. Chihuahuan Ravens are documented just west of the plateau along the Rio Grande around Del Rio, and are widespread just south of the Edwards Plateau in Frio Co.

Chihuahuan is common in southern Texas (excluding the coastal plain), where Common is rare. There are reports of Common in Mexico along the Rio Grande Valley almost to the Gulf, but these are undocumented. On the Coastal Plain, Chihuahuan Raven is very common around the Brownsville Dump, but rarely reported north of there. There are only two verifiable records in the Macaulay Library from farther north and east along the coast of Texas: from Kenedy Co in Mar 2011, and Aransas County in May 2023. The few other Macaulay Library photos identified as Chihuahuan Raven from this area are either unidentifiable or show other species

(American Crow and Tamaulipas Crow). Chihuahuan Raven could occur anywhere on the Texas coast, given records in Louisiana, but is very rare at best, and Common is also possible.

There are photos of a Common Raven at Sarita, Kenedy Co, in Apr 2023, so it is not safe to assume that every raven in southern Texas is Chihuahuan <https://ebird.org/checklist/S132843615>.

Oklahoma ■ Both species are considered residents in the western panhandle, and Chihuahuan Raven (but not Common) is also reported from the southwestern corner of the state. Among the photos in the Macaulay Library identified as Chihuahuan Raven, only one is definitely that species, from Cimarron Co at the western tip of the panhandle in Jan 2022 <https://ebird.org/checklist/S101050406>. Most of the identifiable photographs from that area, and all three identifiable photographs from the southwestern part, show Common Ravens.

Kansas ■ Both species are considered local residents in the southwestern corner of the state, but among over 20 eBird reports with photos identified as Chihuahuan Raven, none are conclusively identifiable as Chihuahuan, and several are definitely Common. It is likely that Chihuahuan Raven does occur, since there are photos from nearby in Colorado, but this needs confirmation.

Nebraska ■ Chihuahuan Raven was reported to be regular in southwestern Nebraska in the late 1800s, but no recent records are accepted and there is only one specimen, precise location unknown, from Jun 1951. A recent sight record from north central Nebraska was accepted only as Raven sp. (Silcock and Jorgensen 2023), and several extralimital records of ravens in nearby states are confirmed as Common. Common Raven is a rare but increasing resident in the northwestern corner of the state.

Louisiana ■ No records of Common Raven. Two records of Chihuahuan Raven, both in spring in Cameron Parish in the southwestern corner of the state, both well documented and identification confirmed by head shape.

- 12 Apr 2008, Western Holly Beach
- 12 May 2019, Rutherford Beach

Ontario ■ Common Raven is widespread and common. There is one record of Chihuahuan Raven:

- 14 to 26 May 1976, Long Point, captured and banded, showing no signs of captivity. <https://ebird.org/canada/checklist/S15627781>.

This record has been relegated to obscurity as a presumed escapee, but natural occurrence seems plausible. Lending a bit of circumstantial support in favor of natural occurrence, records east of the normal range in Texas and Louisiana are all in spring.

The conservation challenge

Because the range and status of Chihuahuan Raven is apparently so poorly known, there are unanswered questions about its population. **The widespread misidentification of Common Raven as Chihuahuan may mean that the actual population of Chihuahuan is much smaller than currently thought.**

Historical records suggest that the species was more widespread in the late 1800s; common in eastern Colorado and western Nebraska, for example, where it is scarce or absent now. eBird trends and Breeding Bird Survey trends both show widespread declines across the core of the range (although these results should be treated very cautiously). Both datasets also show an increase in eastern Colorado, which is an unreliable and most likely spurious result based on misidentification. Better data is clearly needed in order to assess the status and trends of this species, and there is some urgency, given the potential that the population is small and declining.

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Common Raven

Chihuahuan Raven

In alert posture -
note peaked crown,
concave nape.



Note high forecrown,
sloped nape.



Very shaggy throat,
one peak on crown.



In alert posture -
note two peaks on
crown and nape.



Note high rear crown
in nearly all postures.



Peaked rear crown
distinctive (shown by
Common only when
Common only when
windblown).



Only slightly shaggy
throat, two peaks on
crown and nape.



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David Sibley has been watching and drawing birds for as long as he can remember. At age 18 he began traveling full-time throughout the United States and Canada, all the while studying and sketching. Eventually, he wrote and illustrated multiple books about the birds (and trees) of the region. The goal of David’s work is to reveal and help others connect to the rhythms and patterns of the natural world.