

An examination of the Crow and the limb revealed, that in flying through the woods, the bird had on a downward stroke of its left wing, struck this sharp point, so that it penetrated the wing membrane or patagium, on the anterior side of the radius about three fourths of an inch from its base. The shape and position of the limb was such that the wing, when impaled, allowed the body to fall through an arc of ninety degrees from the plane of flight and then twist so that the bird hung with its back toward the limb, a position in which it was entirely helpless. It was so securely impaled that, because of its weight, the length of the stub, and the absence of anything upon which it could stand, it was unable to free the wing and consequently hung there until it died, probably from strain and starvation. The weight of the bird and its struggles had slit the membrane distally until only a mere shred of the long patagial ligament was left to suspend it at the distal end of the radius.

That the bird was suspended there for some time was evidenced by the fact that it had used both its bill and claws with considerable effect on the limb. Several deep scratches were made in the dead wood by the bill and in one place the whole surface of the wood had been torn away. The condition of the tail feathers also showed that considerable excrement had been discharged while the bird was suspended in this position. At the base of the stub there was also a marked groove which had been worn by the tissue which held the bird.

That the victim was a mature bird, was shown by measurements, plumage, and condition of the bones. It would not be as surprising had the bird been a young one just learning to fly. The accident had occurred probably in the late fall for the body had dried up more or less instead of rotting, and going to pieces, as would have been the case in the warmer weather, when fly larvae were active. The condition of the feathers at the time it was found was remarkably good for the long time that the bird had been dead.

Such an accident as this is so unusual that a record of its occurrence seemed worth publishing.—ALBERT R. SHADLE, *Biology Dept., Univ. of Buffalo, Buffalo, N. Y.*

The Relationships of the American Magpies.—It seems to be generally accepted that the Black-billed Magpie of America is a subspecies of the Old World *Pica pica* also that the Yellow-billed Magpie is a full species.

Obviously the yellow bill of the last named is regarded as a very distinct and qualitative character, this yellow pigmentation invades the whole head skin of *nuttalli* although it is only readily apparent on the bill and the triangular space behind the eye. In a freak specimen collected by the writer the yellow also appears on the claws of both feet, this rather indicates that the yellow of the head and bill may not be of very ancient origin. A member of the Old World group has the head skin pigmented a brilliant blue yet it is only regarded as a subspecies.

In other characters the Yellow-billed Magpie hardly differs from the

black-billed bird, the voice is the same in all the varying notes and calls. But the iris is the same color as that of the Old World forms and differs from that of *hudsonia*.

During four years in France the writer was surprised to note the great difference in voice between the Old and New World Magpies, the latter to his regret have no call that he can imitate sufficiently well to decoy the birds to him, the former on the other hand had two easily imitated calls and decoyed readily. A more striking distinction was the color of the iris, plain dark brown in the Old World forms and brown with a conspicuous outer ring of milky white in *hudsonia*.

That the solid brown iris of *Pica pica* extends across the whole of the Palaearctic region is proved by the record of that very careful observer Dr. Leonhard Stejneger who, in Bulletin 29, U. S. National Museum, gives the color of the iris of the form *kamschatica*, which he regards as a full species, as altogether dark brown.

To sum up the situation, *nuttalli* agrees with *hudsonia* in voice but not in eye color, with the Old World forms in the latter character but differs from them in voice. In the color of the bill and head skin it is unique.

Hudsonia agrees with *nuttalli* in voice which is absolutely distinct from that of the Old World forms and it also has an unique character, the color of the iris.

Eye color is a much more permanent character than that of the bill, many birds regularly change the bill color with the seasons, but the color of the iris once acquired is almost invariably permanent.

So the logical action is either to regard both of the American Magpies as distinct species or both as subspecies of *Pica pica*. The present writer leans to the view that they are both entitled to specific rank as *Pica hudsonia* and *Pica nuttalli*.—ALLAN BROOKS, *Comox, B. C.*

Migrating Blue Jays.—The sentence at the bottom of page 439 of the July, 1930, number of 'The Auk' reads "He also insists that Blue Jays migrate." This must have surprised many readers, especially those living in the Mississippi Valley region, who have seen thousands of migrating Blue Jays. It brings up the question "Do Blue Jays of the Atlantic Coast have a different habit?"

In the interior of North America the migration of Blue Jays is as regular as that of the White-throated Sparrow with which it closely coincides in time, occurring for about a month in the spring and a similar period in the fall. Several flocks of these migrants may be seen in each season by those who spend time out-of-doors. The migratory flocks, varying in numbers from eight to a hundred or more, often fly so low that they can be identified by the naked eye. Quite often a flock of these birds will alight in the trees about one's home, sometimes indulging in their "jay jay" calling, and having taken a short rest, they fly onward in their scattering flock formations.

The description given by Dr. Barrows in 'Michigan Bird Life' is accurate