STATUS OF THE HARLAN'S HAWK IN WASHINGTON, AND NOTES ON ITS IDENTIFICATION IN THE FIELD

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The "Harlan's Hawk" (*Buteo jamaicensis harlani*) was first reported in Washington in 1968. Since then it has been recorded in the state with increasing regularity, and in increasing numbers. The records fall between 26 September and 28 March, and come mainly from three areas: the region surrounding Spokane in eastern Washington, and small areas of western Skagit and Whatcom counties in western Washington.

I believe that the recent increase in records in Washington is not simply a reflection of better trained and equipped observers turning up a bird which was always present, but rather indicates that *harlani* is currently establishing itself as a regular winter visitor.

IDENTIFICATION IN THE FIELD

It is first necessary to say something about the identification of *harlani* in the field, since this is a subject of much, perhaps unnecessary, mystification. I am writing this section not only because I hope it will be of help to others, but also to show how I am able to individualize birds confidently in the field for purposes of ascertaining the number of birds under observation each winter. My discussion covers only dark-phased birds; I have never seen the light phase, and so cannot comment on it.

As with all birds which require careful identification, it is well to see several characters together, rather than to rely on any one by itself. In this regard, I have found a paper by Wood (1932) particularly helpful. He compared a large series (137) of *harlani* with a series of the dark-phased Western Red-tailed Hawk (*B. j. calurus*), the bird he considered most likely to be confused with Harlan's Hawk.

One point of constant difference he found is a liberal spotting of white on the back of *harlani*, and also on the underparts, "often from bill to feet." This is opposed to an absence of white on the body of the dark-phased *calurus* except at the base of the feathers of the head and neck. I have found this white spotting, which is inadequately represented in the field guides (Peterson 1947, 1961; Robbins et al. 1966), to be a regular and helpful character for recognizing even sitting birds, when no other field mark is visible. I have also found it useful for distinguishing between individual birds in the field, since the spotting on the underparts occurs in a number of unique patterns. There are two basic patterns: (1) a dark ground color thickly spotted with small white dots (see Wood, op. cit., Figure 22) and (2) large white spots with the black

ground color reduced to a reticulation about them.

The two basic patterns grade into each other in a continuous series. In the extremes I have seen, either the entire breast and belly are dark, with only a few white flecks on the upper breast, or the black reticulation is so reduced that it fragments, producing an effect of a white ground color with black streaking (Wood, Figure 20). These two extremes seem to correspond to the "Melanistic" and the "Intermediate" phases of Friedmann (1950), although both are very dark birds generally. In patterns between these extremes, there is frequently a tendency for the dark coloring to predominate on the belly, the light on the breast, creating the effect of a dark "belt" below a lighter breast. I have also seen an individual with a thin band of white spotting at the junction of the dark upper breast and lower belly.

Although Wood does not mention this, birds I have seen have frequently had large patches of white on the head as well. For example, I have seen two individuals with large white "goggles" around the eyes.

Another good recognition character (inaccurately represented by Peterson, and inadequately by Robbins et al., but shown very well in Wood, Figure 22) is the underwing marking, by which I have recognized *harlani* soaring high above me. The constant feature is that the entire wing lining is dark, *heavily spotted with white.* Both Robbins et al. and Peterson also show *calurus* and the dark phase of the Rough-legged Hawk (*B. lagopus*) with entirely dark wing linings. In this I believe they are inaccurate. Even very dark phased *calurus*, in my experience, tend to have buffy wing linings with the typical Red-tail's capital "C" at the carpal. Similarly, I have seen Rough-legged Hawks that were entirely black, not even showing white at the base of the tail, which nonetheless retained a typical essentially white underwing with a strong black carpal patch. But even if some individuals of these forms are marked as the field guides show them, the distinguishing character of *harlani* is the white spotting within the black.

The tail, of course, is the best character for identification of *harlani*. Further, its variability in color and marking, in combination with the pattern of the underparts, is useful for recognizing individual birds. Most frequently I have observed a white tail streaked and mottled with black, the mottling more or less coalescing into a ragged subterminal, or sometimes terminal, black band (well illustrated in the two pictures of flying *harlani* in Robbins et al. 1966:73). But occasionally the tail is more or less suffused with pale rusty (the "cinnamomeous" of Friedmann, op. cit.). One bird I saw several times had this color just on the outer one or two rectrices of an otherwise typical tail, which helped me to identify this particular individual at a glance, even from a distance, when it flew away from me. Another had the base of its tail white with the rusty color starting about mid-tail and becoming grad-

ually darker to the tip. Despite this odd tail (Friedmann describes one like it), I am certain of the identification, because the bird also had abundant white spotting on its back, breast, and belly, and had dark but white-spotted wing linings (this is the advantage of having several characters on which to rely).

Providing additional confirmation on the last mentioned individual were the naked, bright yellow tarsi. Seeing the yellow tarsi (except on very typical *harlani*) is a necessary check to avoid confusion with dark-phased Rough-legged or Ferruginous hawks (*B. regalis*).

The tail of the immature *harlani*, according to Wood, has the barring in oblique angles and zigzag lines, rather than straight as in *calurus* (see his Figure 23). In my experience this character cannot be seen in the field. However, the white spotting on the body and the markings of the underwing will identify even the immature bird.

WASHINGTON RECORDS

The state's first record for *harlani* was in 1968 in the Spokane area (see Appendix for all records). In 1970 a probable *harlani* was again seen near Spokane, but not well enough to be certain of the identification. In this same area two were observed in the winter of 1971-72, and one in the winter of 1973-74. All of these were seen, either originally or confirming others' sightings, by James F. Acton and (usually) Warren A. Hall.

In the 1971-72 winter season the first Harlan's Hawk was recorded in western Washington, a light-phased bird seen by James Duemmel near Bellingham, Whatcom County. During the same period I saw a dark-phased *harlani* in western Skagit County 30 km south of Bellingham. In the winter of 1972-73 I saw two more in the same area of Skagit County, one of these repeatedly; and judging by the differing descriptions (Eugene Hunn pers. comm.) an additional two were seen in roughly the same area by Laurence C. Binford and Hunn. In the 1973-74 winter season I saw six individuals in the same area of Skagit County, and two more in the Bellingham vicinity. Some of these I saw repeatedly. Other birders I sent to a favored location also saw *harlani*, but I do not know if these were the same or different birds, and so I do not include them in this account.

In all, at the time of this writing (1974), *harlani* has been reported four times in the Spokane area and three times in the Bellingham area. The remaining eleven Washington sightings are from an area only 5 or 6 km in diameter between the towns of Bayview and Allen, western Skagit County. I have made the majority of my sightings along Benson Road, finding the birds in an area no more than 100 x 200 m in extent where the edge of a steep wooded ridge borders an extensive area of flat open agricultural land.

PRESENT STATUS IN WASHINGTON

For three reasons, I believe that *harlani* is in the process of establishing itself as a regular winter visitor to the state: (1) the steadily increasing number of records each winter; (2) its occurrence each year, not at random throughout the state, but regularly in three specific areas; (3) a discernible pattern to its invasion.

INCREASED SIGHTINGS

A sudden increase in sightings of a bird, particularly a difficult-to-identify raptor, does not necessarily indicate that the bird in question has actually undergone a change in status. Two factors may have operated instead. First, larger numbers of better trained and equipped birders are in the field now than there were even a few years ago, so that even a declining species might be recorded more frequently now than formerly. Secondly, it is possible for a species to be regularly present but undetected in an area. When it is at last seen, other birders learn the field marks and make a special effort to look for it, turning up a rash of sightings which give the illusion of a sudden invasion. I believe I can demonstrate that in the case of *harlani* in Washington, neither of these factors is operating, and that the increasing reports of this bird indicate an actual change in status.

Acton (pers. comm.) has been actively birding the Spokane area since 1960. He did not see *harlani* until 1968, and since then has made three other positive and two probable sightings. Duemmel (pers. comm.) has been actively birding on the Lummi flats area west of Bellingham since 1966, but did not see his first *harlani* until 1971. In each case the bird was first seen by an experienced observer on his home territory and was instantly recognized as unlike any bird seen previously in the area. These obviously are not, then, cases of an increase in observers, equipment or expertise.

My own case is different. I first moved to western Skagit County in September 1970, but did not explore the area very carefully in the winter of 1970-71. In subsequent years I have covered it fairly consistently, turning up one *harlani* in 1971-72, two in 1972-73, and six in 1973-74. In each year I looked for them in the same place. Although in 1973-74 I spent, if anything, less time than in the previous two years searching for *harlani*, I found them almost every time I looked. So I am satisfied that the increased number of my sightings was not a question of my knowing better where to look, but rather was due to an actual increase.

REGULAR OCCURRENCE

My next point is that *harlani*, being recorded regularly in only three small areas of the state, is establishing regular wintering areas. If it were

merely casual in the state, it could turn up anywhere. Its extreme localization, especially in western Skagit County, on the other hand, suggests that it is resorting habitually to a traditional area.

It can, of course, be argued that if a bird is always sought in the same place, it will only be found in that place, thereby biasing the number of observations there. Indeed Acton (pers. comm.) feels there is too much suitable habitat and too few observers around the Spokane area to allow speculation on whether or not the bird is localized there. The case is different in my own area. The entire Skagit and Samish River flats of western Skagit County make up, in winter, one of the best raptor areas in the state, being particularly rich in falcons (*Falco* spp.). The small area where I have found *harlani* regularly is in the center of this larger area and (apart from *harlani*) is rather less productive than the rest of the flatland. It is fair to say that I explore the rest of the flatland in the county much more regularly than I do the "Harlan's Hawk" area, and yet I have never encountered *harlani* anywhere outside their area. Within their area, which they share in winter with Western Red-tailed and Rough-legged hawks, in 1973-74 I encountered *harlani* more frequently than either of the other forms.

Two of the three sightings of *harlani* in the Bellingham area were made by myself on the same day, at a time in the spring when my experience told me *harlani* would begin disappearing from the Skagit flats area. Since Duemmel (pers. comm.), canvassing the Bellingham area thoroughly during that winter, had not seen any *harlani*, I suspect the two I saw were birds moving north from my area.

INVASION PATTERN

According to the AOU Check-list (1957) *harlani* nests in a relatively small area of southeast Alaska, southwest Yukon, northeast British Columbia, extending southeastward into Alberta. The migration route is southeastward to wintering grounds in another relatively small area of south-central United States.

Since 1962 there have been a number of records of *harlani* in and around Washington which are all well to the southwest of the traditional migration route. These records follow a pattern which lends further support to my suggestion that *harlani* is exploring and establishing new wintering grounds. The pattern (Figure 1) begins with a wide and random scattering of fall occurrences (southeastern British Columbia; Bozeman, Montana; Spokane, Washington; northeastern Oregon), suggesting migratory exploration. This is followed by winter records (at Bozeman and Spokane), suggesting birds beginning to overwinter. At the same time birds begin to appear west of the Cascade Range (near Vancouver, B.C., near Portland, Oregon, and in northwestern Washington). Finally, the records increase in numbers and regularity, and be-

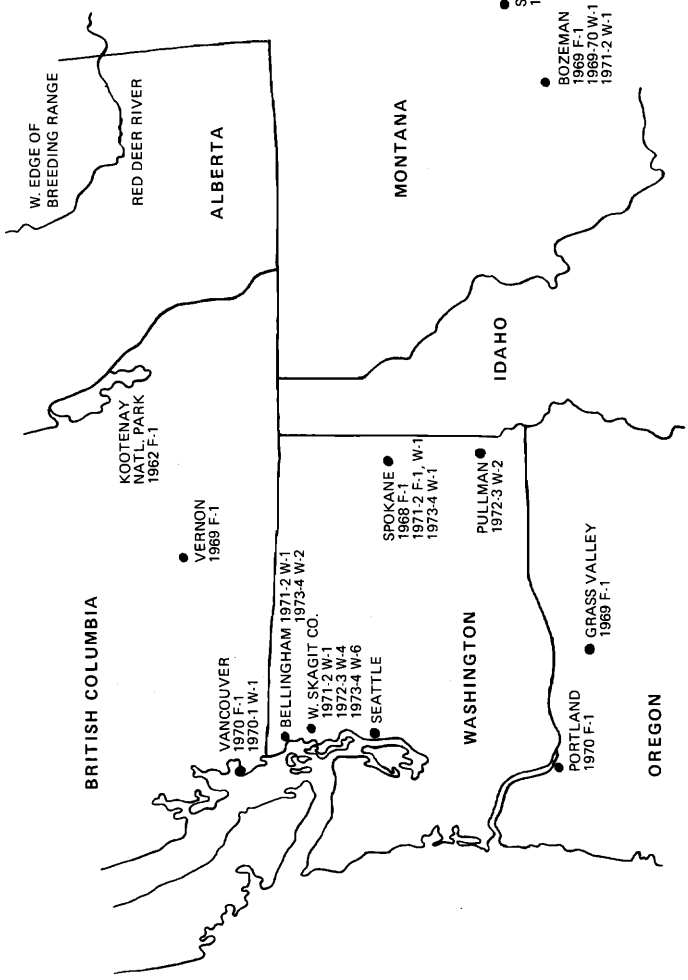

Figure 1. Records of Harlan's Hawk (*Buteo jamaicensis harlani*) in the Pacific Northwest which have occurred southwest of the AOU Check-list (1957) range. Year, season, and number of individuals present are shown for each locality. F indicates fall records (September through 15 November) and W indicates probable overwintering birds (16 November through 28 March).

come localized (around Bozeman, around Spokane, and in western Skagit and Whatcom counties) as the new wintering grounds are established.

SUMMARY

Some field marks helpful for identification of the darker phases of "Harlan's Hawk" are discussed, and suggestions are given for distinguishing particular individuals in the field. All known records for the occurrence of *harlani* in and immediately around the state of Washington are given. It is noted that these occurrences have increased dramatically in the past few years and have become increasingly localized, especially around one very small area of western Skagit County in western Washington. It is argued that this species, unrecorded in the state before 1968, has now become established as a regular winter visitor to western Skagit County and possibly to the Spokane region.

ACKNOWLEDGMENTS

I wish to thank James F. Acton for generously supplying me with his records for northeastern Washington, Bruce Webb, Laurence C. Binford, and Tim Manolis for reading earlier versions of the manuscript and making numerous suggestions, and Anthony Galván III for attractively illustrating my paper.

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APPENDIX

Extralimital records for Harlan's Hawk in the Pacific Northwest are arranged chronologically by winter season. Records with no reference following them are of my own observations. *Audubon Field Notes* and *American Birds* are abbreviated AFN and AB, respectively.

1962-63—1, Kootenay Natl. Park, SE B.C., 18 Oct 1962 (Rogers, AFN 17:51, 1963).

1964-65—1, N of Bozeman, Mont. (1st state record), 25 Oct 1964 (Rogers, AFN 19:61, 1965).

1968-69—1, W of Spokane, Wash. (1st state record), 26 Sep 1968 (Acton pers. comm.).

1969-70—1, S of Vernon, B.C., 4 Sep 1969; 1, near Grass Valley, Sherman Co., Ore. (1st state record?), 13 Nov 1969; 1, near Bozeman, 22 Dec 1969 (Rogers, AFN 24:71, 522, 1970).

1970-71—1, Sauvie's Island, near Portland, Ore., 14 Aug 1970; 1, Ladner, near Vancouver, B.C., 21 Nov 1970; 1 (possible falconer's escape—Wayne Weber pers. comm.), Pitt Meadows, near Vancouver, B.C., 13-19 Feb 1971 (Crowell & Nehls, AB 25:96, 616, 1971).

1971-72—1, W of Spokane, 10-11 Oct 1971 (Acton pers. comm.); 1, W of Bozeman, 24 Dec 1971-26 Feb 1972 (Rogers, AB 26:631, 1972); 1, S of Spokane, 30 Jan 1972 (Acton pers. comm.); 1, Lummi flats, near Bellingham, Wash., 30 Dec 1971-22 Jan 1972 (Crowell & Nehls, AB 26:645, 1972); 1, western Skagit Co., Wash., 10 Mar 1972.

1972-73—1, western Skagit Co., 21 Dec 1972-28 Mar 1973 (erronesouly reported, in Crowell & Nehls, AB 27:653, 1973, for the Lummi flats); 2, western Skagit Co., 30 Dec 1972 (Hunn pers. comm.); 1, Sweetgrass Co., Mont., 10 Jan 1973 (Rogers, AB 27:640, 1973); 1, western Skagit Co., 3 Mar 1973; 2, N of Pullman, Wash., 22 Mar 1973 (Rogers, AB 27:640, 1973).

1973-74—1, S of Spokane, 24 Nov 1973-30 Dec 1974 (Acton pers. comm.); 1, western Skagit Co., 25 Nov 1973; 1, western Skagit Co., 2 Jan 1974; 1, western Skagit Co., 9 Feb 1974; 1, western Skagit Co., 23 Feb-16 Mar 1974; 1, Lummi flats, 14-21 Mar 1974; 1, Bellingham, 14 Mar 1974; 2, western Skagit Co., 23 Mar 1974.

Sketch by A. Galván III