

Status and Identification of forms of White Wagtail in Western North America

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Two forms of White Wagtail (two full species, according to Soviet research) occur in Alaska: one breeds there, one is a rare stray. Which is more likely south of Alaska? This thorough investigation produced some astonishing answers

ON THE MORNING of 22 May 1980 Bill Lenarz and Sue Smith found a White Wagtail at the U.S. Department of Commerce's National Marine Fisheries laboratory on Paradise Drive in Tiburon, Marin County, California. Bill called me in time, and I had an opportunity to observe the wagtail at very close range for more than an hour. I was astounded to see that its back was mostly black, a characteristic of the race *Motacilla alba lugens* which had never been positively recorded in North America south of Alaska. The gray-backed northeast Siberian race, *M. a. ocularis*, a rare breeder in western Alaska, had been reported several times on the west coast south of Alaska.

The Tiburon wagtail sang a long, elaborate, very soft song of mostly slurred notes while it fed among rotting planks of an old broken-down wharf. It fed slowly, picking insects, bobbing and wagging its tail. In flight it gave a loud penetrating "tchizzick" call. Leonard Compagno took many black-and-white photographs (Figure 1), and Phil Schaeffer took additional color photographs. The thin black line through the eye and the white face are found only in *lugens* and *ocularis*. No other races of *M. alba* show this feature. This, along with extensive black clouding on the scapulars and back, identified this bird as *lugens*.

I had seen one other White Wagtail in California, an adult at Watsonville, Santa Cruz County in August 1979, but I was not sure of its race (Laymon and Shuford 1980a). My doubts were based largely on comments of B.W. Tucker in Tyler (1950): "The (*lugens*) female and the male in winter have gray backs . . . and could not be distinguished from *ocularis* in the field; indeed many specimens in the hand appear . . . to be separable only with difficulty."

I thus resolved to review all records of White Wagtail in western North America and clarify their identification. Fortunately, the Watsonville bird returned while I was preparing this paper and its racial identity proved to be the unexpected *lugens* also.

GEOGRAPHIC VARIATION

Various authorities differ in their taxonomic treatment of this complicated bird. Currently most authorities follow Peters (1960) in which eleven subspecies are recognized. *M. alba* is considered by Peters to form a superspecies with the Japanese Wagtail *M. grandis*, the Large Pied Wagtail *M. maderaspatensis* of India, and the African Pied Wagtail *M. aguimp*. Berigovoi (1965) interpreted variation within this superspecies as a geographical distribution of independently variable color-complexes. These are the amount of white on the chin, wing and side of neck; and the amount of black on the back, forehead and through the eye.

Vaurie (1959) divided *M. alba* into three subspecies groups based on the color of the back of the breeding males. Two of these groups, the *yarrellii* group (consisting of *M. a. yarrellii*, breeding in the British Isles, often called Pied Wagtail) and the *lugens* group (consisting of *M. a. lugens*, *M. a. leucopsis*, and *M. a. alboides* breeding in east Asia) are black-backed in the breeding male. These two groups are widely separated from each other by the *alba* group in which males are always gray-backed. The race *M. a. ocularis* belongs to this last group.

Recent studies have shown that Vaurie's "*lugens* group" may not accurately reflect the genetic relationships of the forms involved. Nazarenko (1968) showed that *lugens* and *leucopsis* actually nest side by side without interbreeding. *Leucopsis*, however, interbreeds freely with *M. a. baicalensis* which Vaurie placed in the *alba* group. *Baicalensis* in turn interbreeds freely with *M. a. ocularis* where they contact. *Lugens* also overlaps *ocularis* without interbreeding (Kistchinski and Lobkov 1979).

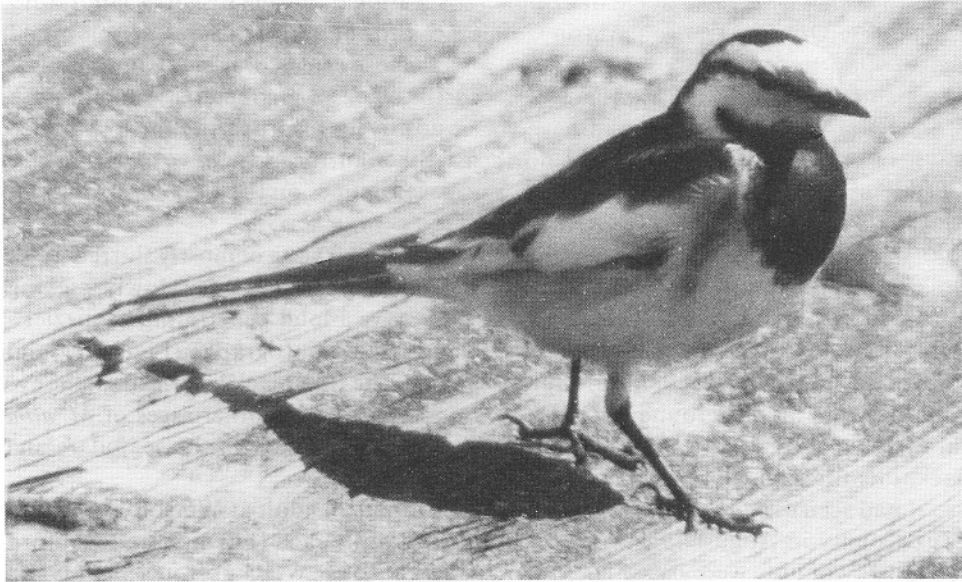


Figure 1. Adult male *Motacilla [alba] lugens* at Tiburon, Marin County, California, on 22 May 1980. Note the extensively black back and scapulars, white chin and broad white edges to the outermost tertiary. Photo by Leonard Compagno.

For more detail see section on interbreeding.

It may be of interest that the three forms mentioned above, *ocularis*, *baicalensis*, and *leucopsis*, which interbreed freely are all dark-winged subspecies, whereas *lugens* is a white-winged form. It seems that the color of the back may not have been the best criterion for dividing *M. alba* into subspecies groups and that the color of the wing may be more significant in determining true relationships.

Two forms usually considered subspecies, *personata* and *lugens*, were elevated to the status of full species in the most recent Soviet checklist (Stepanian 1978) based on the lack of interbreeding with other subspecies in areas where they overlap, Turkestan and Ussuriland respectively.

Only two forms have ever been found in western North America, *lugens* and *ocularis*. A third, *M. a. alba*, breeds in Greenland.

MIGRATION

Breeding ranges of White Wagtail forms in northeast Asia and Alaska are mapped in Figure 2.

Ocularis migrates inland across China and North Korea, wintering from Bangladesh to the Philippines. *Lugens* moves south of its breeding range, wintering in southern Japan and southeast China. In South Korea it is a migrant and winter visitor. It may be significant that I could find no true *ocularis* in the fairly extensive series of Korean specimens at the Museum of Vertebrate Zoology, Berkeley. Those labeled *ocularis* were misidentified *lugens*. South Korean *ocularis* specimens cited by Austin (1948) should be rechecked. The mid-winter specimens are almost certainly erroneous.

Ocularis has only recently been validly recorded from Japan (Yada 1980). Banding data presented by McClure (1974) show that many *lugens* breeding in Sakhalin and southern Kamchatka winter in Japan.

Stejneger (1885) noted the absence of *ocularis* in southern Kamchatka and speculated that they take an inland route west of the Stanovoi Mountains. Thus the two races migrate along different paths. Both races are said to winter together in Taiwan and southeast China (Vaurie 1959).

Both races are spring migrants on the Commander Islands but they do not breed there (Johansen 1961). *Lugens* is usually considered regular there and Stejneger collected only one *ocularis*, but Hartert (1920) reports six additional spring and summer specimens of *ocularis* from the Commanders while only an equal number of *lugens* were taken.

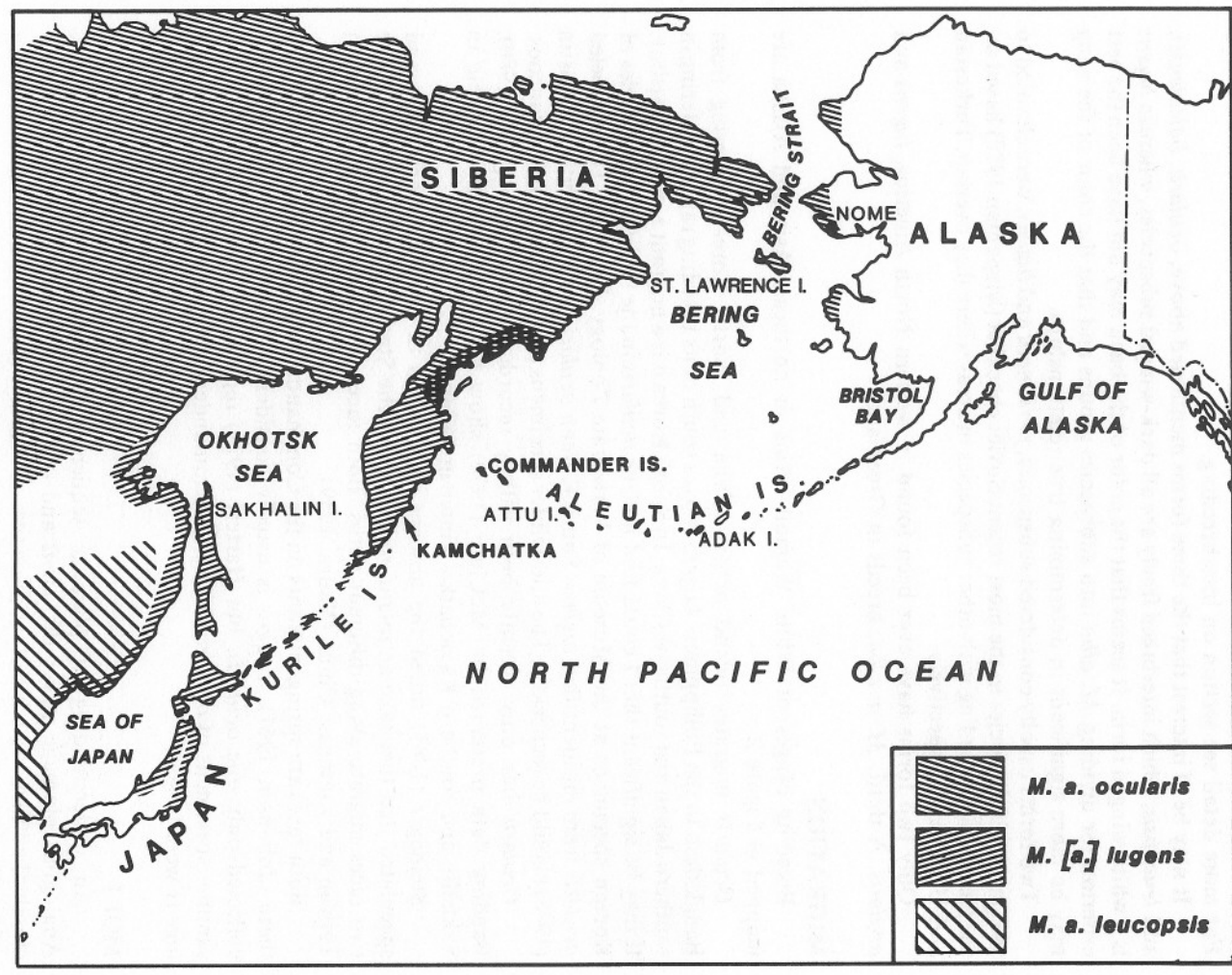
MOLT

An understanding of plumage sequences is important for identification. Analogous plumage stages of *lugens* and *ocularis* may resemble each other more closely than they resemble other plumages of their own form. The timing of molt may affect the timing and duration of extralimital occurrences.

Wagtails have two molts each year, a complete molt in fall and a partial molt in spring. The fall molt of White Wagtail has been studied by Baggott (1970) for the partially migratory *M. a. yarrellii* in England. His results agree with those for the migratory *M. a. alba* at Leningrad studied by Kukish (1974).

Persson (1977) found that adults in Sweden start to molt right after breeding, from 7 July to 10 August. In England the mean date of the onset of molt was 16 July with most adults not finishing molt until mid-October. In Leningrad adults averaged 60 to 70 days to complete fall molt.

Figure 2. Approximate breeding ranges of the forms of White Wagtail in northeast Asia showing areas of sympatry in southeast Ussuriland after Nazarenko (1968) and northeast Kamchatka after Kistchinski and Lobkov (1979). Recent range extension in Japan after Nakamura (1980).



In the following discussion, largely digested from the three sources listed above dealing with *M. a. alba* and *M. a. yarrellii*, I have adopted the term "tertiaries" as used by Dwight to mean the innermost three secondaries. In wagtails these feathers are very enlarged and extend almost to the tip of the folded wing. In the field they tend to hide the other remiges (primaries and secondaries).

The fall molt of juveniles never includes the primaries or the outer six secondaries; the tertiary, rectrices and greater secondary coverts are also usually retained. In most juveniles the distal two or three greater secondary coverts are kept but the others are replaced. Males molt more coverts than females and occasionally all coverts are replaced. In England the duration of post-juvinal molt varied from 60 days in early-hatched birds to 40 days in birds from the second brood. In Leningrad the post-juvinal molt lasted only 40-45 days.

A partial spring molt takes place in March and April. The body feathers and the central rectrices are molted. Usually the lesser coverts are replaced. Rarely the greater and median coverts and the tertiary are shed. Females seem to replace fewer feathers than males.

Wagtails have very soft plumage and to offset the effects of wear, some individuals have a partial molt during the winter which may include body feathers, some rectrices, tertiary, wing coverts and occasionally even primaries. This has been well documented in some pipits (Hall 1961). Yamashina (1933) found some *lugens* molting in December.

A gradual molt of all head feathers takes place during the first winter. The crown and throat feathers are gradually replaced beginning in October, becoming black by spring. The ear coverts are also gradually replaced, becoming whiter.

Lugens differs from other races in that it has a three year molt sequence (Sharpe 1885, Stejneger 1892). Full adults differ from second year birds in the greatly increased amount of white in their wing, the dark spots at the tips of the secondaries being lost. Individuals of *ocularis* achieve full adult plumage in their second winter.

IDENTIFICATION

Most of the detailed published descriptions of both races (Sharpe 1885, Stejneger 1885, Ridgway 1887 and 1904, La Touche 1930) are at least partially misleading. Sharpe's juvenal *ocularis* is a first-winter bird. Stejneger's adult female *lugens* could be an *ocularis* hybrid. Ridgway's adult female *ocularis* is in winter plumage. La Touche does not provide a complete plumage sequence.

The following is largely distilled from the excellent descriptions of Yamashina (1933) and the concise diagnosis of Hartert (1910). I hope it will help end the confusion.

In summer, White Wagtails arrive on their breeding grounds after completing their spring molt. The two races are then fairly easy to distinguish. All *ocularis* are gray-backed and the black bib on the chest extends all the way up to the base of the bill, white on the chin being very rare. This plumage is well illustrated by Singer in Robbins *et al.* (1966) pg. 239 and by Eckelberry in Pough (1957) pl. 23. Female and male *ocularis* are nearly identical in summer, but the black area on the back of the head is usually narrower in females.

At this time all male *lugens* have a great deal of black on the back and some older birds may become entirely black-backed. The chin is usually white but 20 out of 46 males examined by Kistchinski and Lobkov (1979) showed black on the chin. This plumage is illustrated by Peterson (1961) pg. 250 but the black bib should not extend

across the side of the neck to the back and the white edges on the wing should be broader. A slightly better plate can be found in Pough pl. 23, but the lesser coverts should be black not gray. Plate 9 in Kobayashi (1965) provides an accurate illustration of this plumage.

Female *lugens* in summer are gray-backed and may resemble *ocularis* particularly in the first year when the white in the wing is not yet fully developed. Most female *lugens* have more black on the nape and may show some dark shading on the back, but even lacking this they can be distinguished by their white chin and upper throat. Only 8 out of 24 females examined by Kistchinski and Lobkov (1979) showed any black on the chin. Females show a larger area of white than males. Virtually all *ocularis* exhibit a black chin at this season. An excellent drawing of the female *lugens* in summer can be found in Pough pg. 221.

By mid-summer juveniles may be seen, but the two races are virtually identical in this plumage. It is illustrated in Robbins *et al.* (1966) and Pough (1957).

Some adults may start molting as early as July but the black chin feathers of *ocularis* do not start to be replaced by white until August. After this time confusion with *lugens* is possible. In female *lugens* the tips of the back feathers are darker and give the back a slightly more bluish coloration than in *ocularis*. After the first year, adult *lugens* develop much more white on the remiges and the edges of the tertiaries become more broadly white than in *ocularis*. In the first year of both races the brown wings are retained from juvenal plumage and by summer these feathers become badly worn. The black chin and darker gray shading on the flanks and sides will distinguish *ocularis* from the white-chinned and pale gray-flanked *lugens* until wing molt begins.

After the fall molt, identification becomes much more difficult since both sexes of both races are gray-backed with a white throat and a black crescent-shaped band across the chest instead of a large black bib. In females of both races the black crescent is narrower and may be mixed with white, and the black on the crown becomes mixed extensively with gray. Adult *lugens* usually show some irregular black clouding on the back at this season, especially the males. Black feathers are often retained on the lesser coverts in *lugens* while these feathers are always gray in *ocularis*. In both forms the lower rump and upper tail coverts are black, but in *lugens* the black is more extensive and usually includes the upper rump. A good plate showing winter adult *lugens* male and female is Kobayashi pl. 9.

Adult *ocularis* have much narrower white edges to the remiges showing as a series of separate white lines on the folded wing. On *lugens* the edges are broader and the secondaries are white forming a solid white patch on the folded wing connecting to the solid white greater coverts. In flight the broad white inner webs of the primaries form a white "window" extending more than half way out from the base. In *ocularis*, the white at the base of the primaries tends to be hidden and the wing appears dark in flight.

First winter birds can be distinguished from adults by the brownish juvenal remiges. Usually the juvenal greater coverts are retained and these appear to be tipped narrowly with white forming white wing-bars rather than the solid white patch seen on adults of both races. The juvenal remiges are narrowly-edged whitish, somewhat darker and shaded more with brownish in *ocularis*. The juvenal wing pattern in both races is similar to that of adult *ocularis* but with much less contrast.

Most first winter birds cannot be safely identified to race outside their normal range. In the hand the culmen of *ocularis* averages slightly shorter: 10.1 mm to the nostril vs. an average of 10.3 mm for *lugens* in the specimens I measured. There is a great deal of overlap in all measurements, however, and only extreme examples can be

positively identified. The key given by Ridgway (1904) based on exposed culmen will not identify most specimens.

There seems to be a slight difference in bill shape. That of *ocularis* is more slender, tapered and delicate, while that of *lugens* is thicker, broader at the middle and stronger-looking.

SYNOPTIC KEY

- A. Back black, or gray with black patches *lugens*
- AA. Back uniform gray
 - B. Remiges mostly white, forming a large white patch visible easily in flight both from above and below *lugens* (adult)
 - BB. Remiges mostly dark
 - C. Remiges blackish sharply edged white *ocularis* (adult)
 - CC. Remiges brownish, coverts usually forming wing-bars
 - D. Bill smaller and more delicate, edges of remiges darker; *ocularis* (1st year or juv.)
see text
 - DD. Bill larger and stronger, edges of remiges lighter; *lugens* (1st year or juv.)
see text

The differences in the last two choices, D and DD, are qualitative and I am not able to identify most individuals with certainty even in the hand, much less in the field. A detailed quantitative study of a large series of correctly identified specimens might help, but I have not had access to a sufficient number of *ocularis* skins to conduct such an investigation.

INTERBREEDING

Lugens breeds sympatrically with *ocularis* on the northeast coast of Kamchatka. Out of thirty White Wagtails collected in the zone of overlap, Kistchinski and Lobkov (1979) found only one hybrid. It was a male with a back pattern like that of *lugens* but with the black chin and wing pattern of *ocularis*. Because hybrids are so rare, they consider *lugens* to be a distinct species.

Their view is strongly supported by an earlier study at the opposite end of *lugens*'s range in coastal southern Ussuriland. There Nazarenko (1968) found *lugens* sympatric with another race of White Wagtail, *M. a. leucopsis*. Hybrids were rare, less viable than the parental types and were being rapidly eliminated. Isolating mechanisms were found involving differing habitats and breeding schedules.

The status of *lugens* as a full species was accepted in the most recent Soviet checklist (Stepanian 1978). Breeding ranges of the three forms and their areas of sympatry are shown in Figure 2. *Lugens* does seem to fit the criteria for a full species. The common name "Black-backed Wagtail" used by Tyler (1950) would be appropriate.

I have provided a translation of Kistchinski and Lobkov's paper to Dr. Eugene Eisenmann, Chairman of the A.O.U. Check-list Committee, at his request. I understand that this subject will definitely be considered by the A.O.U. Check-list Committee.

STATUS IN WESTERN NORTH AMERICA

The two forms separate geographically in Alaska. *Ocularis* migrates across the Bering Strait to St. Lawrence Island and to the Alaskan mainland, where it is a rare but regular breeder from Nome to Cape Lisburne (Fay and Cade 1959, Peyton 1963). It is much rarer elsewhere on the mainland where it has been found along the coast from Bristol Bay to Barrow. Individuals, presumably of this race, have straggled as far east as the Mackenzie delta in Canada (Weber and Shepard 1975), inland to central Alaska (Kessel and Gibson 1978), and south to the Pribilof Islands (Thompson and De Long 1969) and Adak in the Aleutians (Byrd *et al.* 1978).

Lugens is much less common, having been recorded in the western Aleutians mostly in spring where it has been found from Attu to Adak (Thayer and Bangs 1921, Byrd *et al.* 1978). Recently it has been recorded at Gambell, St. Lawrence Island, during the first week of June 1977 and 1979 with maxima of six in 1977 and two in 1979 (R. Stallcup and Will Russell pers. comm.), and one *lugens* there in late May 1978 (Jon Dunn pers. comm.). There is one record of a male far to the east at Glacier Bay 2 July 1969 (D. Gibson pers. comm.). It is not known to breed in Alaska. There are a few fall records, mostly of young birds of unknown race, from the western Aleutians and one from Juneau.

South of Alaska White Wagtails are casual, having been recorded eleven times: once in British Columbia, three times in Oregon, five times in California, and twice in Mexico.

British Columbia — A description of one at the mouth of the Coquitlam River about 14 miles east of Vancouver, 2-21 March 1973, has been published (Weber and Shepard 1975). These authors suggested it was *ocularis* mostly on geographic considerations. Wayne Weber kindly provided me with a detailed transcription of notes taken by G. Allen Poynter which indicates that this was a dark-winged bird. No contrasting edges were noted and I conclude that this individual was in first winter plumage. Thus the possibility that it might have been *lugens* cannot be eliminated.

Oregon — One was at Eugene from 3 February to 31 March 1974 (not 26 March 1974 as published in *American Birds*, Tom Lund pers. comm.). It was published as "evidently . . . *ocularis* . . . changing from juvenal to adult plumage" (Crowell and Nehls 1974) and a photograph was included in the published report. It and others which were sent to me by Larry McQueen show that it was actually a winter adult. The greater coverts have been replaced and form a solid white patch. The extent of white on the wing, the blackish rump and the dark scapulars evident on one photograph show that this bird was actually *lugens*. Unfortunately no written descriptions exist but all observers recall "a lot of white" in the wing in flight (Clarice Watson pers. comm.). Its cap was black on 31 March but it still had a gray back on that date (T. Lund pers. comm.). I judge that it was a female *lugens*.

One was seen 9 February 1975 at Umatilla National Wildlife Refuge, Morrow County, Oregon (Rogers 1975). Details provided by Craig Corder show that this was in first winter plumage. The subspecies is indeterminate.

Another was seen at Harris Beach State Park near Brookings, Oregon, 4 June 1980 by Dr. Robert Tweit. This was an adult bird with a solid white wing-patch and a lot of white in the wing in flight. These are Dr. Tweit's recollections and are not from notes. It was a gray-backed bird (R. Tweit pers. comm.). I consider that this was probably a female *lugens*, but the nature of the details makes a positive identification impossible.

California — One was described from McGrath State Park, Ventura County,

18-20 October 1972. It was accepted as the first state record (Winter 1973). I have reviewed the submitted details but they are much too sketchy to determine anything other than that it was probably a White Wagtail.

One in first winter plumage was photographed on Southeast Farallon Island 10 October 1974 (McCaskie *et al.* 1979). Juvenal wing coverts have been retained and its race is uncertain (Figure 3).

One in first winter plumage was photographed at Goleta, Santa Barbara County, 9-11 October 1978 (Webster *et al.* 1980). Although this was originally published as "apparently *M. a. ocularis*" (McCaskie 1979), this was based on a misunderstanding about the age of the bird combined with the conventional wisdom of the time that *ocularis* was more likely to occur (Louis Bevier pers. comm.). This individual resembled the Farallon bird in that the juvenal wing coverts produced wing-bars instead of a solid white patch. Also the dusky auricular feathers had not yet been shed. In this plumage the two forms are virtually indistinguishable. A photograph of this individual has been published (Roberson 1980).

Two photographs of an adult at Watsonville, Santa Cruz County, 7 August - 22 September 1979 have been published (Laymon and Shuford 1980a, Roberson 1980) and many excellent descriptions were submitted. I have examined other photographs of the bird in flight taken by Al Ghiorso which show that the secondaries were all white and the white bases of the primary feathers extended more than half-way out. Other photographs of the bird on the ground but with the folded wing exposed show such an extensive patch of white on the wing that *ocularis* could be ruled out. The back feathers did not show the slightest trace of dark clouding, and the possibility that the bird might have been a hybrid had to be considered. At the time *lugens* seemed a very unlikely candidate on the basis of past published records.

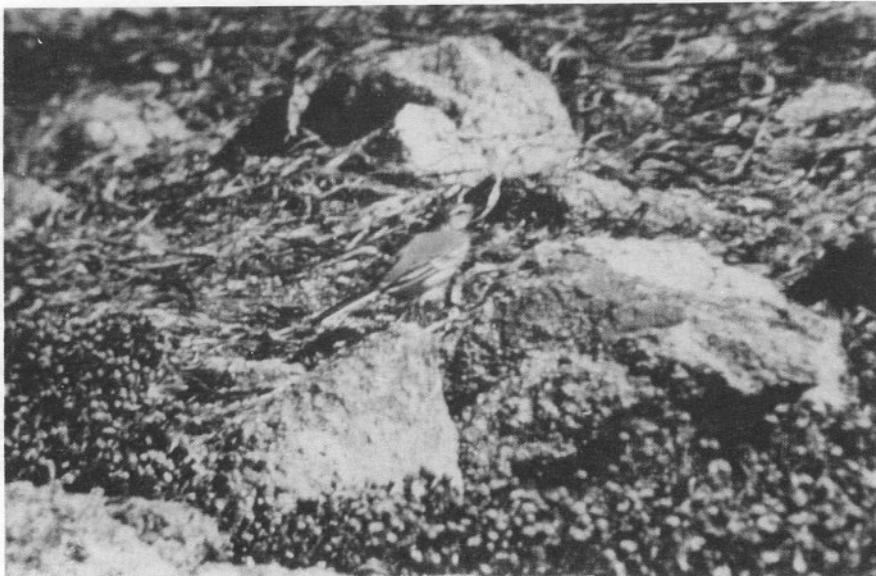


Figure 3. First winter White Wagtail at Southeast Farallon Island, California, 10 October 1974. The juvenal wing coverts form wing-bars, and the outer web of the outermost tertiary is only narrowly edged with whitish. The dusky auriculars have also been retained from juvenal plumage. Photo by Phil Henderson, courtesy PRBO.

The problem was simplified when the bird (undoubtedly the same individual, considering the circumstances) returned to the same place 20 July 1980 while this paper was in preparation. I saw the bird 25 July 1980 and it was definitely an adult female *lugens*. It was still in breeding plumage and the dark-gray back, black scapulars and white chin were clearly visible. The white pattern in the wing was the same as in 1979 with no visible dark spots at the tips of the secondaries. Thus this bird was already at least in its third year when it was first seen in 1979. The following description is from my 25 July 1980 notes:

Underparts white, slight gray tinge to flanks and sides. Back slate-gray mottled blackish. Scapulars and lesser coverts black. Crown from center of head to nape black. Forehead and cheeks white. Thin black line from bill through eye connecting to nape. Large black bib on upper breast and throat, but chin white. Greater wing coverts white; secondaries all white and primaries white on basal 3/4 with gray tips. Tail and rump black. Outer tail-feathers white. Side of neck white, but bib almost connecting to nape. Bill, legs, and eye black. Much smaller than nearby Killdeer. About length of nearby Spotted Sandpipers but much smaller body and very long tail. Walked with short darts and stops as it chased flies actively. Very wary.

By the first week of August the back was already light gray (Kem Hainebach pers. comm.), and it assumed the plumage in which it was originally found in 1979. It was last seen 21 September 1980 (S.F. Bailey pers. comm.).

A singing male *lugens* was photographed at Tiburon, Marin County, 22 May 1980. See Figure 1 and introductory discussion above. Two additional photographs have been published (Laymon and Shuford 1980b, Roberson 1980). Note that this individual was an adult and not a first-year male as stated in the *American Birds* photo caption.

Grinnell and Miller (1944) include *M. a. ocularis* in their supplementary list based on an old undated sight record from Santa Barbara.

One seen briefly in flight 2 March 1975 at Watsonville by a single observer was not accepted by the California Records Committee (Luther *et al.* 1979). This reported sighting was less than two kilometers from the location of the one in 1979 and 1980.

Mexico — The first North American record of White Wagtail was collected by L. Belding (1883) at La Paz, Lower California 9 January 1882. It was identified as *ocularis* by Ridgway (1882) but at the time Ridgway (1883) considered *lugens* a synonym. Stejneger (1885), after clarifying the true status of the two races, examined Belding's specimen and concluded that it was *ocularis* because of its short bill and a brownish tinge to its back.

The alleged distinction in brownish tinge is not visible to me in comparing skins, probably because the specimens I have seen are somewhat foxed. The difference may be valid in fresh or living birds. Ridgway (1883) described Belding's specimen as less brownish-gray above than fall specimens of true *ocularis* from northeast Siberia, however.

This specimen was next checked and "identification confirmed" in 1928 by J.H. Riley when it was mounted and on public display at the U.S. National Museum (Grinnell 1928).

Unfortunately this important specimen has since been lost (George Watson pers. comm.). A description was published (Ridgway 1883) and the bird was definitely in first winter plumage and not an adult as generally supposed. The culmen measurement is abnormally small even for a female *ocularis*, but the tail length suggests a male.

Nevertheless, the brownish edges to the wing feathers and the small bill do indicate that the bird was not *lugens*. I do not quarrel with the original identification of it as *ocularis*.

An adult was observed in Sonora 30 April 1974 (Alden and Mills 1974). It was in Arroyo Cajon Bonito in extreme northeast Sonora, less than 10km from the Arizona border. Details kindly supplied by Gale Monson show that this was a gray-backed bird with a black chin, and "black and white in the wing primaries." *Ocularis* has the black primaries narrowly edged with white and I consider this to have been most likely that form.

IMPORTATION

Some records have been questioned on the grounds that they could represent escapes from captivity. Relative numbers of captive birds in the United States which could produce such escapes can be estimated from the importation figures for 1968-1974 (Banks 1970, Banks and Clapp 1972, Clapp 1975, Clapp and Banks 1973a and 1973b, Greenhall 1977). Only one White Wagtail has been listed as imported and it was *M. a. alboides* from southeast Asia. No others were imported although eight of the related African Pied Wagtail *M. aguimp* were brought in. The possibility that any western North American records were escapes is extremely remote.

CONCLUSIONS

Although *ocularis* is much more common in Alaska and is a longer distance migrant than *lugens*, it seems that *lugens* may be more likely to occur south of Alaska. There are two possible explanations. *Ocularis* migrates to Alaska via an inland route so that it is oriented in an easterly direction by the time it reaches the Bering Strait. *Lugens* is a coastal bird, evidently arriving in the Aleutians over water from a land departure far to the southwest (Gibson in press). Overshoots such as the St. Lawrence Island records and the Glacier Bay record cited above may find it natural to return south following the coast of North America.

The other factor is the apparent rapid range extension of *lugens* in recent years. This has been well documented by Nakamura (1980) in Japan, and it is possible that a similar range extension is taking place in northeast Siberia. The St. Lawrence Island records may be an indication of such a range extension. This might also account for the sudden increase in records south of Alaska since 1972.

There is a clear correlation between individuals remaining at a locality over a period of time and the expected timing and duration of molt. Evidence of molt has been observed in all individuals which have remained in an area. Other individuals seen at times of the year when they would not be molting have never stayed in one area for more than a few days.

Of the eleven records south of Alaska, six were in spring, four were in fall and one was in winter. The dates of three of the records suggest that some individuals may summer south of Alaska.

SUMMARY

Eleven records of White Wagtail in western North America south of Alaska are evaluated. Three documented by photographs are clearly referable to the form *lugens*. One specimen, no longer extant, is considered *ocularis*. One sight record is considered probably *lugens* and another probably *ocularis*. Five other west-coast records cannot be assigned definitely to one or the other form. Four of these (two were photographed)

are indistinguishable in first-winter plumage. One was too poorly documented to evaluate.

Evidence is presented from Soviet literature that these forms are actually separate species. Criteria are presented for distinguishing adults of the two forms in the field with emphasis on females and winter plumage. Adults are most reliably identified by the much larger white wing-patch of *lugens*.

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