IDENTIFICATION OF WHITE AND BLACK-BACKED WAGTAILS IN BASIC PLUMAGE

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The breeding range of the White Wagtail (*Motacilla alba*) circles much of the northern hemisphere, extending from southeastern Greenland and Iceland east across Eurasia to Siberia and westernmost Alaska. Through this broad range there is extensive subspecific variation, with a total of ten subspecies recognized (Mayr and Greenway 1960, Cramp 1988); the form nesting in western Alaska and northeastern Siberia is *M. a. ocularis* (Swinhoe's White Wagtail). The Black-backed Wagtail (*M. lugens*), nesting in eastern Siberia and Japan, was split by the AOU (1983) from the White Wagtail.

Both the Swinhoe's White and Black-backed wagtails are distinguished from other white-faced subspecies of the White Wagtail by a dark stripe through the eye. All other subspecies of the White Wagtail (including *M. a. alba*, which has strayed to Labrador and could occur farther south in eastern North America) lack the pattern of a distinct dark eyestripe in a white face, although immatures of all subspecies (including nominate *alba*) can have dusky auriculars.

Adults of the White and Black-backed wagtails are easily distinguished by the mostly white primaries and secondaries of the Black-backed, which are acquired in the second prebasic molt (July to September). First-year Black-backeds have dark remiges much like those of all White Wagtails and consequently are harder to identify.

Primarily from examination of museum specimens we found several features that, particularly if used in combination, permit the identification of most individual Swinhoe's White and Black-backed wagtails. In general, basic-plumaged adult wagtails are marked more strongly than immatures and, within age classes, males are marked more strongly than females. Thus, there is a gradation from the brightest adult male to the dullest immature female. In addition, immature Black-backeds are marked more strongly than immature Swinhoe's. Consequently, the most difficult identification problems lie in distinguishing immature female Black-backeds from adult female and well-marked immature male Swinhoe's. Immature female and dull immature male Swinhoe's, and most immature male Black-backeds and adult male Swinhoe's, are all fairly distinctive.

We recognize that this paper is far from the last word on the identification of these two forms, and observers with an opportunity to study these wagtails critically in the field, or hand, could add significantly to our knowledge of their identification. In this respect, we acknowledge our debt to important prior work by Morlan (1981) and the unpublished notes of David Bell, archived in the files of the California Bird Records Committee.

METHODS

At the museums listed in the acknowledgments we examined 138 winter specimens of Swinhoe's White Wagtail and 78 of first-winter Black-backed

Wagtails. All specimens examined were collected between September and mid March: a few from September still had some juvenal feathers on their face and throat, and most from mid or late March onward had begun to attain some black alternate plumage on the crown and throat.

The main characters we examined were forehead color, crown color, back and rump color and contrast, wing pattern, and the pattern of the outermost rectrix. To analyze characters we segregated specimens tentatively by age on the basis of wear and plumage, and by sex on the basis of specimen labels, measurements (males average larger than females), and plumage.

The potential of hybrids was a concern. Although we encountered some troublesome birds, when all characters were evaluated in combination we found fewer than 5% of specimens that might be hybrids. We omitted such birds from our analyses, but this problem must be borne in mind by both field and museum workers.

RESULTS AND DISCUSSION

Molt

An understanding of molt is integral to determining the age and thus identification of a wagtail. Details of the molts of Swinhoe's White and Black-backed wagtails appear not to be well known. Because the extents of the prebasic and prealternate molts of the Yellow (*M. flava*), Gray (*M. cinerea*), and White (*M. a. alba* and *M. a. yarrellii*) wagtails in Europe are all much alike (Jenni and Winkler 1994), however, we suspect that the prebasic molts of Swinhoe's White and Black-backed wagtails follow a similar pattern.

Although Morlan (1981), citing Sharpe (1885) and Stejneger (1892), noted that "*lugens* differs from other races [of the White Wagtail] in that it has a three-year molt sequence," we doubt this. A careful reading of these sources suggests that Stejneger (1892) misinterpreted Sharpe (1885), but, after examination of a larger series of specimens, even the former concluded that "we are reluctantly forced to admit that still more examples are needed to get to the bottom of the question." Although labels of photographs in BMRC (1983) suggest that third-year Black-backed Wagtails show more white in the wings than second-year birds, the text (translated from the Japanese) notes "after second winter molting, the black and white pattern of plumage is fixed." We believe that individual variation is responsible for the supposed differences between first basic and second basic remiges. To our knowledge, a consistent pattern difference between first basic and second basic remiges would be unique among passerines and should be supported by incontrovertible evidence.

Prebasic molt. The prebasic molt of European White Wagtails occurs mostly to entirely on the summer grounds. This molt is complete in adults, most of which finish molting from late August to early October (Cramp 1988). The BMRC (1983) noted that molt of adult Black-backed Wagtails occurs before migration, during July and August; California records, however, suggest that in some vagrant Black-backed Wagtails the prebasic molt can occur or finish at migration stop-over sites.

As in most passerines, the first prebasic molt of wagtails does not include the flight feathers other than a variable number of rectrices (48.2% of

European White Wagtails molt no rectrices, 15.6% molt only two rectrices, usually the central pair, and only 4.4% molt the whole tail; Jenni and Winkler 1994). Most importantly, the first prebasic molt rarely includes all of the upperwing coverts. In Europe, first-year White Wagtails replace 0–10 (i.e., none to all; mean 5.3) of the greater coverts on each wing; 10.6% of birds molt no greater coverts, and only 4.5% replace all greater coverts (Jenni and Winkler 1994). In the British subspecies *yarrellii*, males tend to replace more coverts than females (Baggott 1970). Apparently all birds replace all median coverts, while birds that replace all of their greater coverts often replace one or more tertials and rectrices (Jenni and Winkler 1994).

Thus, in autumn and winter, the best age criterion for wagtails is what are known as "molt limits" (Jenni and Winkler 1994, Pyle 1997), i.e., contrast in pattern and/or wear among the greater coverts or between the greater and median coverts. First-year birds often show such contrast [e.g., Figure 1; also see figures 142–143 of Jenni and Winkler (1994) and pp. 206–208 of Pyle (1997)], but adults, which have a complete molt, do not. The contrast can be seen in the field as early as August or September (P. Alstrom pers. obs.). Because the juvenal and adult remiges of White Wagtails are similar, however, the few first-year birds of this species that replace all of their greater coverts and tail may not be distinguished safely from adults. The first prebasic molt also can include from none to all three tertials, but it may be difficult to distinguish molt-related contrast in these feathers. Our examination of specimens also suggests that forehead color is useful for ageing some White Wagtails into early winter (see below).

Prealternate molt. The prealternate molt of both first-year and adult European White Wagtails begins between December and February and completes between late February and April, prior to spring migration (Cramp 1988). This molt includes 0–7 greater coverts (mean 3.4) and 0–3

Figure 1. Immature male Black-backed Wagtail at Bolinas, Marin Co., California, 3 November 1995. Note the large bill with a pale fleshy base to the mandible, the bright white (first basic) median coverts that contrast with the duller (juvenal) greater coverts, and the sharply contrasting black lower rump.

Photo by Steve N. G. Howell

tertials on each wing, and 0–8 rectrices (Jenni and Winkler 1994), with the black areas on the head and throat among the last feathers to be replaced. For both Swinhoe's White and Black-backed wagtails, our examination of specimens revealed that molt of the black areas on the head and throat is mainly from February onward, while many specimens from February and March were missing the outermost rectrices.

In Europe, adult White Wagtails molt earlier, on average, than do first-year birds, while males have a more extensive molt than females, and some first-year females do not molt in spring at all (Cramp 1988). Unless a bird retains worn juvenal greater coverts, ageing a wagtail in spring and summer is very difficult (Svensson 1984, Jenni and Winkler 1994). By summer, however, it appears that the primary coverts and remiges of first-year birds often are notably browner and more abraded than the blacker and relatively fresh adult feathers.

The prealternate molt of the Black-backed Wagtail extends from February to April (BMRC 1983). An immature male Black-backed Wagtail that wintered in California (January to April 1996) started to attain black back feathers in early February, and the back showed progressively more black until late March, when the upperparts and throat filled in quickly with black by 6 April (CBRC files). Molt of the greater upperwing coverts began in early February, when the inner one or two were replaced, and then was suspended until early March, when the rest were replaced by early April (CBRC files).

This broad spectrum of variation in molt may seem overwhelming, but the bottom line for a wagtail seen in autumn and early winter is that contrast between two generations of feathers among or between the greater and median upperwing coverts indicates a first-year bird. Determining the age of a winter White Wagtail may not always be possible, however, because a few birds undergo an extensive first prebasic molt. Because the prealternate molt of both first-year and adult birds can be similar in timing and extent, a wagtail in that molt cannot be aged safely unless it is retaining juvenal feathers.

Forehead Color

The color and contrast of the forehead with the crown may be useful for ageing Swinhoe's White Wagtails in the field through early winter. We assessed forehead color of each specimen by means of three categories: (a) white or whitish; (b) mottled or flecked dusky; (c) mostly or all dusky (Figure 2).

Adult Swinhoe's and Black-backed wagtails have a white or whitish forehead that typically contrasts distinctly with the gray or black crown. A few adult female Swinhoe's may have a slightly dusky forehead, but we found no adults with an all-gray forehead concolorous with the crown.

In October and November, most immature Swinhoe's have foreheads that are dusky to mottled dusky; by January, most have white foreheads (Table 1). The Black-backed appears to attain the white forehead more quickly, and we found no immature males with a dusky forehead (Table 1). On average, males of both forms attain white foreheads earlier than do females (Table 1).

Thus wagtails with a dusky gray forehead concolorous with the gray crown are immatures (White and some immature female Black-backed), those with a contrasting whitish forehead through early winter are mainly immature

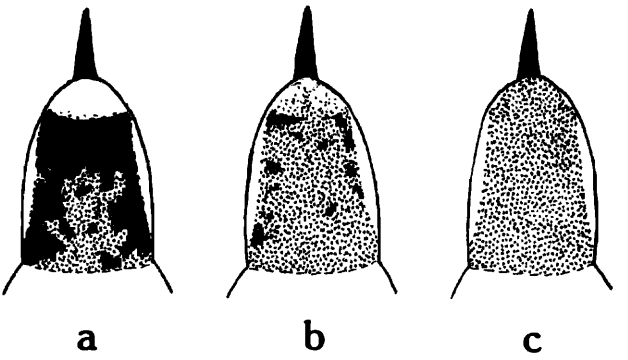

Figure 2. Variation in crown and forehead pattern: (a) forehead white, crown with 65% black; (b) forehead mottled or flecked dusky, crown 5% black; (c) forehead dusky, crown 0% black.

Table 1 Seasonal Variation in Forehead Color of Immature Black-backed and Swinhoe's White Wagtails from September to March[a]

Species	Sex	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Swinhoe's White Wagtail (n = 45)								
White	Male			2		1	1	
	Female					1	2	1
Mottled	Male		4	3				
	Female	2	4	1	1	1	1	
Dusky	Male	2	3	1				
	Female	5	3	2	1			
Black-backed Wagtail (n = 53)								
White (often washed yellow)	Male	5	5	4	1	5	1	2
	Female			4	1	3	3	1
Mottled	Male	1	2	1				
	Female	2	4	3	1	1		
Dusky	Male							
	Female	1	2					

[a]See Figure 2 (adults have clean white or whitish foreheads year-round). Foreheads become increasingly whiter through the winter, perhaps from abrasion of dusky feather tips in combination with molt. Males may attain whiter foreheads earlier than females; in early winter, the Black-backed Wagtail generally has a whiter forehead than the Swinhoe's White Wagtail.

Black-backed or adult Swinhoe's. We are unsure if this change in forehead color reflects the last, prolonged stages of the first prebasic molt or if it is due simply to the wearing away of dusky feather tips; it may be a combination of both of these factors.

Crown Color

We estimated the percentage of black on the crown of all specimens (Figure 2, Table 2); zero percent black indicates an all-gray crown. We noted an occasional fresh black crown feather in some mid-December immatures but not until February did we frequently detect new black feathers. These crown patterns can be seen in the field if good views are obtained of a bird.

Males in basic plumage have, on average, more black in their crowns than do females. In Swinhoe's White Wagtail, only adults have mostly or all-black crowns, an all-black crown being typical of adult males: 44 specimens of basic-plumaged adult males had 45–100% (mean 93%) of their crown black, while 19 adult females had 0–70% (mean 30%) black. Most immature Swinhoe's have mostly or all-gray crowns (Table 2). Immature Black-backeds often have extensive black on their crown, and both males and apparently females can have an all-black crown in first basic plumage (Table 2).

Back and Rump Color/Contrast

Table 2 Seasonal Variation in the Percentage of Black on the Crown of Immature Black-backed and Swinhoe's White Wagtails from September to March[a]

Species	Sex	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Swinhoe's White Wagtail[b] (n = 65)								
0%	Male	2	7	4	1			
	Female	7	7	4	2	1	5	
1–10%	Male	1	1	3	1	1	2	1
	Female	2	1	1		3	2	
11–50%	Male			1		1	2	
	Female							1
Black-backed Wagtail (n = 56)								
0%	Male	1				1		
	Female	3	6	7	1			
1–10%	Male		1	1	1			
	Female	1	2			1	1	1
11–50%	Male	4	3					2
	Female		1	1	1	2		
51–80%	Male			3				
	Female							
81–100%	Male	1	3	1	1	1	1	
	Female			1		1	2	

[a]See Figure 2. Prealternate molt of new black feathers starts in late February or March, although rarely a few black feathers appear from mid December.

[b]The crown of none exceeded 50% black.

The back and upper rump of Swinhoe's White and immature Black-backed wagtails in basic plumage are gray, ranging from slightly duskier gray in the Black-backed to brighter bluish gray in the adult Swinhoe's. Some immature Black-backeds (males at least) show diagnostic black flecks on the scapulars and lower back.

The lower rump of immature Swinhoe's White Wagtails is mostly or all gray, with black or darker gray feathers concentrated distally where they merge with the black upper tail-coverts. Adult Swinhoe's, however, especially males, can have the lower rump contrastingly dark, blackish gray. In many immature male Black-backeds the lower rump is mostly or all black, contrasting strongly with the gray upper rump. In immature female Black-backeds, the lower rump can be dusky gray, similar to that of Swinhoe's. The rump contrast can be seen clearly on birds in the field when the wings are held drooped (e.g., Figure 1).

Thus other similarities between immature Black-backed and adult Swinhoe's White wagtails are paralleled by rump contrast. Although adult Swinhoe's can show a fairly contrasting blackish-gray lower rump, abrupt contrast of a solidly black lower rump appears diagnostic of an immature male Black-backed Wagtail.

Wing Pattern

The exact pattern of the median coverts provides perhaps the most useful single clue to a wagtail's identity. In the field, the bases of the median coverts are often covered by the scapulars, so care should be taken in evaluating this feature. The pattern of the greater coverts is also important, as is the overall pattern created by the coverts and by the edges of the secondaries and primaries.

Immature Swinhoe's White Wagtails have distinct dark bases to the median coverts, often appearing as a narrow dark "chain" between the gray scapulars and white tips of the coverts (Figures 3a, 4a/b). Although the first basic median coverts of most female Black-backeds have diffuse gray smudges at the base and narrow gray shaft streaks, these do not contrast strongly with the white feather tips (Figures 3b, 4c). The first basic median coverts of male Black-backeds are bright white, usually without any obvious dusky at the base (Figures 1, 3c, 4d). Adult male Swinhoe's typically have all-white median coverts like immature male Black-backeds.

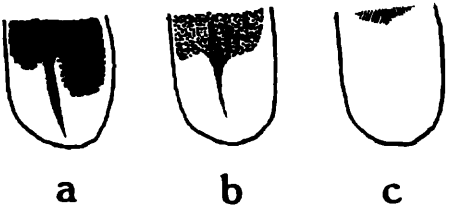

Figure 3. Pattern of median upperwing coverts: (a) adult female/immature Swinhoe's White Wagtail; (b) immature female Black-backed Wagtail; (c) immature male Black-backed/adult male Swinhoe's White Wagtail.

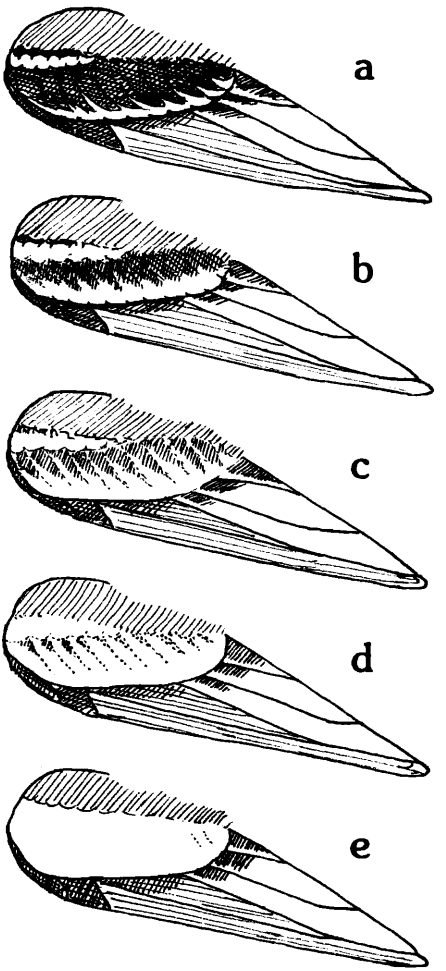

Figure 4. Variation in upperwing-covert patterns: (a) narrow white wingbars (feathers usually worn); (b) distinct white wingbars; (c) broad white wingbars tending to a white panel; (d) broken/mostly solid white panel; (e) solid white panel.

The greater coverts are also more patterned in immature Swinhoe's White Wagtails, whose coverts usually have blackish-gray centers, creating wingbars or a jagged "toothed" pattern intermediate between wingbars and a solid panel (Figure 4a/b). On the immature Black-backed, any dark color is a paler, poorly defined gray that does not contrast strongly with the white edges (Figure 4c/d) and tends not to interfere with the impression of a white panel.

Given that detailed analysis of feather pattern is often not possible in the field, we divided the overall pattern formed by the median and greater

coverts into five categories (Figure 4). As with other characters, adult Swinhoe's average bolder in wing pattern than immatures, and males average bolder than females.

Basic-plumaged adult male Swinhoe's White Wagtails have solid white wing panels (Figure 4d/e), and adult females have a broken panel (Figure 4c/d). Immatures typically have two wingbars, bolder in fresh plumage (through mid winter) and narrower when worn (in late winter) (Figure 4a/b).

Immature Black-backed Wagtails (Figure 4c/e) have a pattern much bolder than in immature Swinhoe's but similar to that of adult Swinhoe's. Rarely, heavily worn immature female Black-backeds show broad wingbars (Figure 4b) similar to those of some immature Swinhoe's (e.g., plate 1, figure 7, of BMRC 1983).

Adult male Swinhoe's often have bold white edges to the primaries and secondaries, narrower at the base of the feathers but still distinct; other plumages typically have duller, whitish to pale brownish edges to their primaries and secondaries. These edges are narrower than on the Black-backed and become narrower or absent at the base of the feathers (Figure 5a). Thus adult female and immature Swinhoe's generally have dark-based secondaries that can form a kinglet-like dark bar between the white-tipped greater coverts and the white-edged secondaries; this pattern is less apparent on adult females. The pattern on the primaries tends to be harder to see (as these feathers are usually covered in the field), but the Swinhoe's often has a dark crescent adjacent to the primary coverts.

Conversely, on immature Black-backed Wagtails the white edges of the secondaries and primaries are more distinct, whitish to white, and become broader at the base of the feathers (Figure 5b); only a few females in late winter have dull, worn edges. These broad edges create a continuous white panel on the secondaries of the folded wing, merging with the white of the greater coverts. The white primary edges widen to include the shaft just adjacent to the primary coverts, creating on some birds a small pale crescent

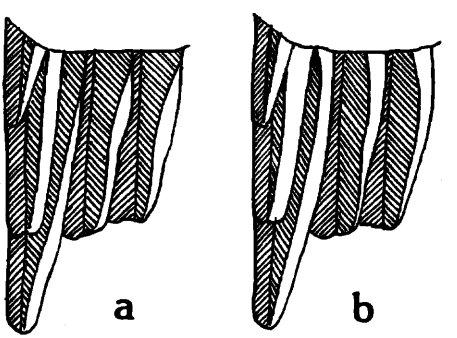

Figure 5. Pattern of white edging on the inner secondaries: (a) white edging narrows at base (typical of an immature Swinhoe's White Wagtail); (b) white edging widens at base (typical of an immature Black-backed Wagtail).

next to the primary coverts like that shown by an immature female Black-throated Blue Warbler (*Dendroica caerulescens*).

Howell (1989) noted that the whiter base to the flight feathers of an immature Black-backed Wagtail may be apparent in the field. His experience with an immature Black-backed (Bolinas, California, November 1995) bore this out. When that bird stretched out its wing, and in flight, the bases of the remiges showed as a broad white band on the upperwing, suggesting the whiter-winged look of an adult Black-backed. The underwings of both species, however, look bright white, because the inner webs of the remiges are white on all birds.

Thus an immature wagtail with a white wing panel connected to a wedge of white on the secondaries is a Black-backed. Note, however, that this pattern is approached closely by some adult female Swinhoe's White Wagtails. Two white wingbars and a dusky bar at the base of the secondaries are typical of immature Swinhoe's. Our field experience indicates that the angle and intensity of light can make it difficult to distinguish between wing patterns 4c and 4d, even between 4b and 4d (Figure 4); photographs can be particularly misleading in this respect, given the potential for the angle of light to cause illusions (e.g., making wingbars appear solid or vice versa), and prolonged critical observation in a variety of light conditions is the best method of evaluating wing pattern.

Outermost Rectrix Pattern

We divided the pattern of the outermost rectrix into "black" and "white" (Figure 6). Birds with only a few very inconspicuous gray flecks on the feather (probably not visible in the field) were classified as white. In the field, this pattern on the inner web of the outer rectrices can be seen on the underside of the closed tail.

Most Black-backed Wagtails (n = 73) had all-white outer rectrices, but a few immatures (n = 5) had a dark pattern similar to the Swinhoe's White Wagtail's. Most Swinhoe's (n = 133) had dark on the outer rectrix, often more extensive than on Black-backed Wagtails with a dark area, but three adults had white outer rectrices.

Thus, while there is a slight overlap in this feature, all-white outer rectrices on an immature wagtail indicate the Black-backed, a conspicuous black area the Swinhoe's.

Other Characters

Although adults of both species may show a faint yellow or buffy tinge on the face, and immatures often lack yellow tones, a distinct yellow wash on the face suggests the immature Black-backed (and see Wild Bird Society of Japan 1982). Immature Swinhoe's may show a faint yellowish wash on its face but not as bold as on the Black-backed. This yellow can be particularly noticeable in the autumn (through early November, at least) but may fade by midwinter.

The Black-backed Wagtail averages larger billed than Swinhoe's, and males average longer billed than females. Although the sexual difference in mean length is only about 1 mm (Howell 1989), it may parallel the useful difference between Hammond's (*Empidonax hammondii*) and *Dusky (E. oberholseri*) flycatchers. Two immature Black-backed Wagtails in California

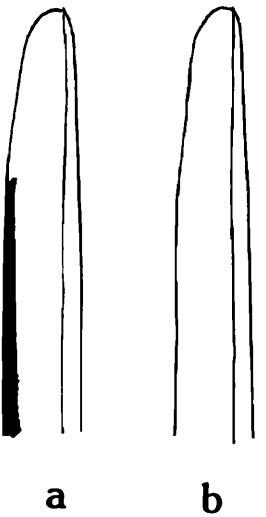

Figure 6. Pattern of the outermost rectrix: (a) "black"; (b) white.

(October 1989, November 1995; e.g., Figure 1) showed strikingly long and stout bills, appearing well outside the range of Swinhoe's.

From specimens and limited field experience it appears that winter adults have all-dark bills while immatures often have a pale fleshy or orange-yellow base to the lower mandible (cf. Figure 1). If so, this could help greatly with ageing White Wagtails and in distinguishing between the adult Swinhoe's and immature Black-backed. An immature male Black-backed Wagtail that spent January to April 1996 in California showed a distinct pale base to its lower mandible in February; by mid March the paler basal area was dull and hard to see, and by early April the bill appeared all black. More field observations are needed to evaluate the usefulness and timing of this character and whether or not bill color varies seasonally in adult wagtails.

Photographs of vagrants in California show an apparent difference in face pattern: the thicker dark eyestripes of Black-backed Wagtails tend to encompass the eye, while the narrower dark eyestripes of Swinhoe's leave the eye more distinct. Specimens do not show such a striking difference, but face pattern is often distorted on dried skins.

The black chest bib of winter wagtails averages broader in adults than in immatures and broader in males than in females. Immature male Black-backed Wagtails may have bibs almost as broad, but perhaps not as clean-cut, as on adult male White Wagtails.

As in alternate plumage (Howell 1989), basic-plumaged Black-backed Wagtails typically have a white shaft to their fourth (from inner) rectrix; in Swinhoe's this feather is typically all dark but may have an indistinct whitish streak on the shaft. Some immature Black-backed Wagtails,

however, have the fourth rectrix all dark (Howell 1989). Exceptional views, preferably supported by photographs, are needed for this character to be used in the field.

Hybrids

Kishchinski and Lobkov (1979) reported that where the ranges of Swinhoe's White Wagtail (*ocularis*) and Black-backed Wagtail (*lugens*) overlap on the Kamchatka Peninsula, interbreeding is "restricted and infrequent," and on St. Lawrence Island, Alaska, vagrant Black-backed Wagtails have paired up with the local Swinhoe's (Badyaev et al. 1996). Nazarenko (1968) reported that *M. lugens* and *M. alba leucopsis* nest side by side with limited interbreeding in northeastern China, while *leucopsis* interbreeds freely with *baicalensis*, which interbreeds with *ocularis*. Recent range expansion by *lugens*, however, has brought about widespread hybridization between it and *leucopsis* in southern Japan, where these two forms have recently come into contact (Alstrom et al. in press), and species limits within this complex remain far from resolved.

The specter of possible hybridization between Swinhoe's White and Black-backed wagtails was always a consideration when we found troublesome specimens. The two differ primarily in wing pattern and back color, with the adult female Black-backed being intermediate between the adult male Black-backed and Swinhoe's. Intermediate-plumaged specimens labeled male could be missexed females, and some immatures might show only partial development of adult characters. Observers in North America should always consider the possibility of a hybrid when confronted with a vagrant White/Black-backed Wagtail that does not show the full characters of one species or the other.

Status in Western North America

Through the winter of 1995/96 there were 46 accepted records (involving 42 birds) of the White and Black-backed wagtails from western North America, south of Alaska: 9 (representing 6 individuals) of the White, 14 (13) of the Black-backed, and 23 unidentified to species (including six we consider as White, and one probable Black-backed) (Table 3). Critical analysis and discussion of all records is beyond the scope of this paper, and we encourage persons whose conclusions differ significantly from ours to publish their findings. We have supplied detailed comments to the California Bird Records Committee concerning all unidentified White/Black-backed Wagtails from that state.

Morlan (1981) concluded that the Black-backed Wagtail may be more likely to occur in western North America than the White, in part because at that time there were three documented records of the former, only one of the latter. Although this is still mirrored in the accepted records to date (Table 3), we believe that the bias toward the Black-backed reflects the ease with which adults are identified and that the true ratio may be nearer 50:50, or perhaps even in favor of the White.

Although records are few, some patterns may be emerging. Adult Black-backed Wagtails have occurred from late July to late September and in May

Table 3 Records of White and Black-backed Wagtails in Western North America South of Alaska, through Winter 1995/96

Date	Location	Source	Comments
White Wagtail			
9 Jan 1882	La Paz, BCS, Mexico	Howell and Webb (1995)	Specimen lost (imm.)
10 Oct 1974	SE Farallon I., San Francisco Co., CA	Binford (1985)	Immature[a]
9–11 Oct 1978	Goleta, Santa Barbara Co., CA	Binford (1985)	Immature[a]
4 Nov 1982–18 Jan 1983	Long Beach, Los Angeles Co., CA	Roberson (1986)	Immature[a]
9 Oct 1983	Arroyo de la Cruz, San Luis Obispo Co., CA	Roberson (1986)	Adult (probable male)
26 Apr 1984	Ocean Park, Pacific Co., WA	B. Tweit (in litt.)	
14 Jan–7 May 1984	Crockett I., Lake Co., WA	Tweit and Skriletz (1996)	Imm. molted into alt. plumage
5–8 Oct 1984	Arroyo de la Cruz, San Luis Obispo Co., CA	Roberson (1986)	Adult (probable male), returning bird
"Oct" 1984–23 Feb 1985	Loreto, BCS, Mexico	Howell and Webb (1995)	Adult (probable male)
22 Nov 1987–6 Mar 1988	Oxnard, Ventura Co., CA	Pyle and McCaskie (1992)	Adult (probable male)
16 Oct 1988–4 Mar 1989	Oxnard, Ventura Co., CA	Pyle and McCaskie (1992)	Adult (probable male), returning bird
23 Dec 1988–21 Jan 1989	Moss Landing, Monterey Co., CA	Unpubl. CBRC data	Immature, probably female[a]
7 Nov–3 Dec 1990	Pajaro R. mouth, Santa Cruz/Monterey Co., CA	Unpubl. CBRC data	Immature[a]
8 Nov 1990–9 Mar 1991	Saticoy, Ventura Co., CA	Heindel and Garrett (1995)	Considered same as Oxnard bird
Black-backed Wagtail			
3 Feb–31 Mar 1974	Eugene, Lane Co., OR	Morlan (1981)	Adult female
7 Aug–22 Sep 1979	Watsonville, Santa Cruz Co., CA	Binford (1985)	Adult, molted during stay
22 May 1980	Tiburon, Marin Co., CA	Binford (1985)	Adult male
4 Jun 1980	Harris Beach State Park, Curry Co., OR	Morlan (1981)	Probable female
20 Jul–21 Sep 1980	Watsonville, Santa Cruz Co., CA	Binford (1985)	Returning adult, molted
18 Apr 1982	Vancouver, B.C.	Campbell et al. (19XX)	
13 May 1985	Mad R. mouth, Humboldt Co., CA	Bevier (1990)	Adult
19 May 1985	Azwell, Chelan Co., WA	Tweit and Paulson (1994)	Adult male
11 May 1986	Ocean Shores, Gray's Harbor Co., WA	Tweit and Paulson (1994)	Adult female
2 Aug–7 Sep 1987	Port Hueneme, Ventura Co., CA	Pyle and McCaskie (1992)	Adult (female?), molted during stay
1 Oct 1989	Rodeo Lagoon, Marin Co., CA	Unpubl. CBRC data	Imm. (probable male)[a]
5–7 May 1993	Point No Point, Kitsap Co., WA	Tweit and Skriletz (1996)	Adult male
6–7 Sep 1994	Crescent City, Del Norte Co., CA	Howell and Pyle (1997)	Adult (probable male)

3 Nov 1995	Bolinas, Marin Co., CA	Garrett and Singer (1998)	Imm. male
25 Jan–12 Apr 1996	Dana Point, Orange Co., CA	Unpubl. CBRC data	Imm. male, molted into alt. plumage
White/Black-backed Wagtail			
18–20 Oct 1972	Santa Clara R. mouth, Ventura Co., CA	Binford (1985)	Description inadequate for specific identification
2–21 Mar 1973	Coquitlan R. mouth, B.C.	Campbell et al. 1997	
30 Apr 1974	Arroyo Cajon Bonito, Son., Mexico	Morlan (1981)	Possibly adult White; *contra* Morlan (1981), not safely identifiable to species; cf. Howell and Webb (1995)
9 Feb 1975	Umatilla Natl. Wildlife Ref., Morrow Co., OR	Morlan (1981)	Immature
24 May 1977	Pachena Point Lighthouse, B.C.	Campbell et al. (1997)	
19 May 1980	Whiffin Point, Sooke, B.C.	Campbell et al. (1997)	
8–9 Nov 1981	Seattle, King Co., WA	B. Tweit (in litt.)	
3 Apr 1983	Cabo San Lucas, BCS, Mexico	Wilbur (1987)	*Contra* Wilbur, no documentation supports the identification as a Black-backed
28 Jan 1984	Loreto, BCS, Mexico	Wilbur (1987)	*Contra* Wilbur, no documentation supports the identification as a Black-backed; original field notes suggest a White more strongly
8 Nov 1984	Cabo San Lucas, BCS, Mexico	Wilbur (1987)	*Contra* Wilbur, no documentation supports the identification as a Black-backed
7–10 Oct 1985	Grand Canyon (S rim) sewer ponds, Coconino Co., AZ	Stejskal and Witzeman (1986)	
3–11 Dec 1989	Pajaro R. mouth, Santa Cruz/ Monterey Co., CA	Unpubl. CBRC data	Description inadequate for specific identification
30 Apr 1990	Keystone, Island Co., WA	Tweit and Skriletz (1996)	
21 Dec 1990–19 Jan 1991	Moss Landing, Monterey Co., CA	Unpubl. CBRC data	Probably White (adult female)[a]
1–3 Sep 1994	Eel R. Wildlife Mgmt. Area, Humboldt Co., CA	Unpubl. CBRC data	Presumed adult by date
30 Apr–7 May 1996	Triangle I., B.C.	Campbell et al. (1997)	

[a]Species identification from our evaluation of documentation in CBRC files.

(and perhaps early June), immatures from early October to early November. There is a well-documented winter record (January to April) of an immature Black-backed Wagtail from southern California and another winter record (February to March), reportedly of a Black-backed, from Oregon.

Adult White Wagtails have been found wintering in California and Baja California from October or November to February or early March. Immatures have been found in winter during December and January (perhaps reflecting Christmas Bird count coverage rather than true arrival?) but then have seemed to vanish, other than one bird in Washington that remained from January to early May. Migrating immature and adult White Wagtails have occurred from October through early November (with adults averaging earlier than immatures) and in April.

Thus adult Black-backeds have occurred earlier in fall and later in spring than all White Wagtails, whereas most midwinter birds have been White. Interestingly, adult Black-backeds have been found more often away from the coast, unlike White Wagtails and immature Black-backeds, which have been mainly coastal.

SUMMARY

Identification of wagtails cannot be simplified and requires critical study of several features. Most identification problems are between the immature Black-backed and adult female and immature male Swinhoe's White. Figure 7 shows typical basic plumages of each. Variation within species is gradual, and many immatures, particularly of the White, cannot be sexed in the field.

All adult Black-backed Wagtails are identified by their mostly white primaries and secondaries. Even though the white flight feathers of the Black-backed may not be immediately apparent on a perched bird, study of the folded wing will reveal useful clues. Diagnostic features are the continuous pure white panel from the median coverts to secondaries, white bases (at least) of all primaries, and some white on the alula and primary coverts. Many individuals (particularly males) show blackish smudges on the back or entirely white outer webs of the tertials, both of which are diagnostic.

Immature female (and many immature male) Swinhoe's White Wagtails are equally distinctive, with relatively narrow white wingbars and dark-based secondaries; all plumages of the Black-backed show far more white on the wing coverts and secondaries. These dull immatures also tend to have an all-gray crown, brownish wings, and a narrow blackish bib.

Other plumages—adult and some immature male White and immature Black-backed—are more difficult to distinguish. Check for contrast in pattern and wear within the greater coverts or between the greater and median coverts, and look at forehead pattern and the color of the lower mandible as clues of age.

The characters typical of Swinhoe's White Wagtail in adult basic and first basic plumage and the Black-backed Wagtail in first basic plumage are summarized in Table 4.

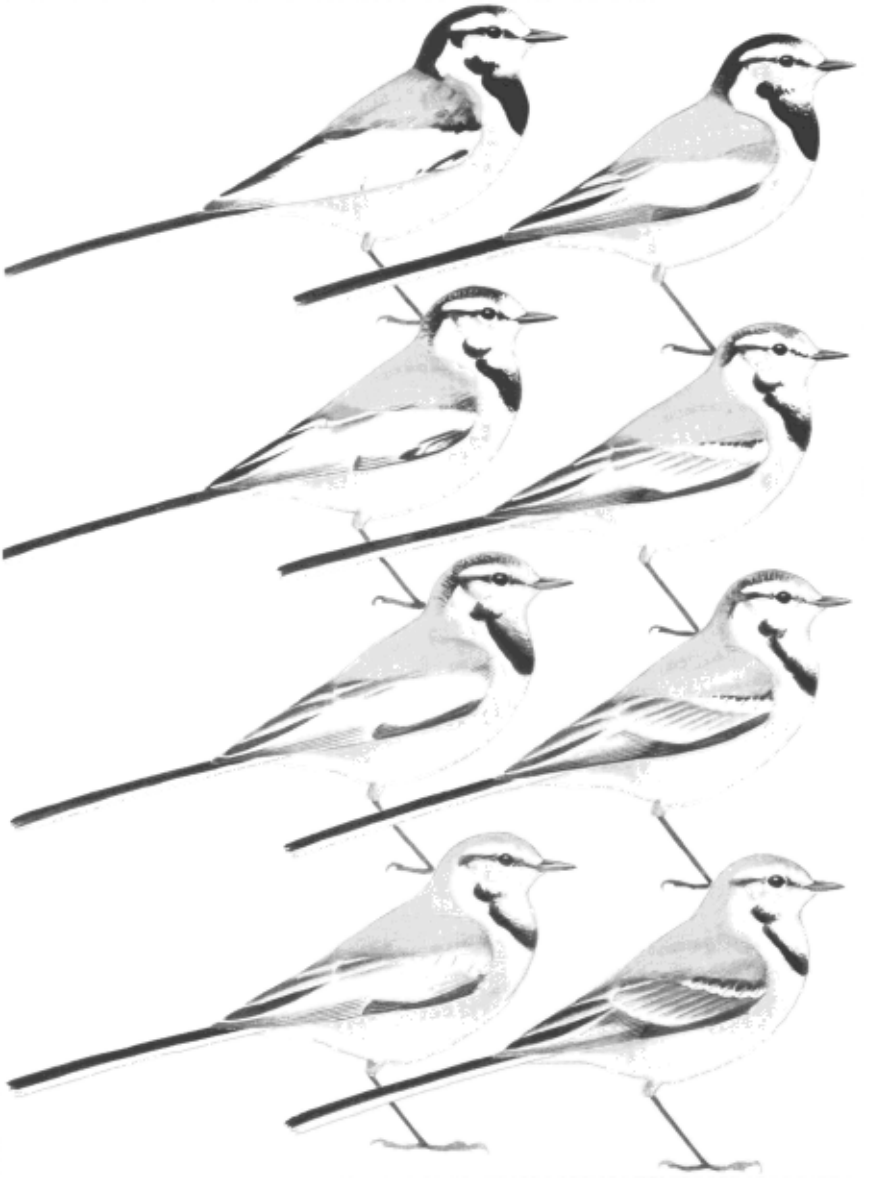

Figure 7. Basic-plumaged Black-backed (left) and Swinhoe's White (right) wagtails. Top to bottom: adult male, adult female, immature male, immature female.

Painting by David A. Sibley

Table 4 Proposed Identification Characters for Adult and Immature Swinhoe's White Wagtail and Immature Black-backed Wagtail in Winter

	Forehead[a]	Crown[a]	Lower Rump	Wings	Bill[b]
Adult White Wagtail					
Male	white	45–100% black; most have all-black caps	dark gray, contrast with blue-gray back not marked	solid or broken white panel; remiges distinctly edged white	medium, dark
Female	white to whitish	0–70% black, variable	dark gray, contrast averages less than in male	bold white bars to broken panel; remiges narrowly edged white at base	small, dark
Immature White Wagtail					
Male	dusky to white	0–50% black, most have little black	gray, little or no contrast with gray back	broad to narrow white bars; remiges narrowly edged whitish at base	medium, pale base
Female	dusky to whitish	0–10% black	gray, as in male	narrow to broad white bars; poorly contrasting white edges to remiges narrow at base	small, pale base
Immature Black-backed					
Male	white to whitish	0–100% black; most have much black	black, in strong contrast to gray back	solid to broken white panel; bold white edges to remiges widen at base of feathers and show in flight as broad band	large, pale base
Female	dusky to white	0–100% black; most have some black	dark gray, often little contrast with back	broad white bars to broken panel; white bases to remiges average less than in male	medium, pale base

[a]Forehead and crown color can change over the winter (see text and Tables 1 and 2).

[b]Bill color may change over winter; more study needed.

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