

# The field identification of North American pipits

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Illustrated by Peter Hayman and Pieter Prall

ALTHOUGH THE WATER PIPIT (*Anthus spinoletta*) and the Sprague's Pipit (*Anthus spragueii*) are fairly easy to recognize using the current popular field guides, the five species more recently added to the North American list are more difficult to identify and sometimes present a real field challenge. The field identification of these latter species has not yet been adequately dealt with in the North American literature. However, much field work on the identification of pipits has been done in the last few years, especially in Alaska and the United Kingdom. This paper is an attempt to summarize what is now known about the field identification of the seven species of pipits that are known to occur in North America.

All seven species of pipits treated here are 6-7 inches (15-18 cm.) in length and have a slender build, a thin warbler-like bill, streaked dark upperparts with a pale eyebrow and two pale wing bars, a dark tail with white or whitish outer tail feathers, pale underparts, usually with some dark streaks on the breast. Pipits walk, rather than hop, often with some tail movement. Their flight is undulating and they often give a distinct call when flushed or flying. Most sing their songs while hovering, gliding, fluttering or circling in the air. They feed on the

ground in open country. However, the two species of tree-pipits use trees for singing and refuge and are often in wooded areas.

All the pipits discussed in the paper, except perhaps the Sprague's, move their tails in a peculiar pumping motion, down and then up. Some species "pump" their tails more than others. This tail motion is often referred to as "wagging." While the term "wag" does include up and down motion as well as side to side movement, it is better to use the more specific term "pump" which is restricted to up and down movements and more precisely describes what pipits do with their tails.

Note that while some species have distinct breeding (spring) and non-breeding (fall) plumages, a few individuals (probably first year) of those species do not acquire breeding plumage in the spring. Thus non-breeding plumaged birds are regularly seen in spring and can be confusing.

The calls of the pipits are all similar, and yet mostly distinct. However, the differences are often subtle and require experience to detect in the field.

Observers, especially those in Alaska, should be aware that species not yet found in North America might eventually occur. Those species are not dealt with

in this paper.

ONCE A BIRD HAS been recognized as a pipit, the first thing to check is the ground color of the back. Is it brown (what shade?), olive, or gray? Then note the black streaks on the back. Are they broad or narrow, sharply or vaguely defined, conspicuous or faint? How extensive are they? Then check for pale streaks on the back. Are there none, two, four, many? What color are they—whitish, buff, brownish buff? Are they conspicuous or faint? Discerning these characteristics of the back will narrow your bird down to one or two species. Then the color of the underparts should be studied. Are they white, buff, pinkish buff? Are they concolorous or is the breast or throat a different color from the belly? Is there little, moderate or heavy black streaking on the breast? Are there streaks on the flanks? What color is the eyebrow? Is it white, buff or pinkish buff? Is it all one color? Does the bird pump its tail down and up? How frequently? Is the hindclaw shorter or longer than the hindtoe? By the time you've answered these questions, most pipits will already be identified. Those few that aren't will require more careful study, both of the bird and the following text to determine their identity.

## WATER PIPIT

### *Distribution*

The Water Pipit, *Anthus spinoletta*, is found throughout North America and is our most common and best known pipit. It breeds in the Palearctic region of Eurasia and in northern North America (Vaurie, 1959). In North America, it breeds across the arctic region from Alaska to Greenland, and on mountain tops in Maine, British Columbia, Washington, Oregon, Utah, Colorado, northern Arizona and north central New Mexico (American Ornithologists' Union, 1957). North American Water Pipits winter on the Pacific Coast from British Columbia south and from the southern United States south to Guatemala. While the American Ornithologists' Union (1957) splits the North American Water Pipits into three subspecies, *A. s. pacificus*, *A. s. rubescens*, and *A. s. alticola*, I follow Vaurie (1959) in treating them as one race, *A. s. rubescens*, for the purposes of this paper.

### *Plumages and Identification*

Breeding-plumaged Water Pipits (*A. s. rubescens*) are quite

distinct and easily differentiated from other pipits by their *pale grayish* upperparts with *faint and indistinct* broad blackish streaks (and *no* pale streaks) on the crown and the back; *unstreaked* hindneck, rump and upper tail coverts; *dark pinkish buff* eyebrow and underparts, with a necklace of black streaks across the breast and a few black streaks on the flanks; somewhat longer tail; *brown to black legs* (all other pipits have *pale* legs). Of the other pipits, the one that most resembles the breeding Water Pipit is the Olive Tree-Pipit. The Water Pipit has *grayer* upperparts; *darker and more uniform* buffy eyebrow and underparts; hindclaw that is slightly longer than hindtoe; different call; and rarely perches in trees.

The breeding plumage of the Water Pipit is acquired in late winter and early spring. The amount of black streaking on the breast and flanks ranges from moderate to almost none. However, even the moderately streaked birds have conspicuously less streaking on their underparts than the other pipits considered here, except Sprague's and breeding Red-throated. The buff of the center of belly and under tail coverts is paler than that of the breast, and some individuals have a paler buff to whitish throat. The narrow blackish gray malar stripe from the lower mandible can be complete, broken or

missing. The buffy band along the lower edge of the brownish-gray ear coverts is often not clearly defined. The buffy eyebrow is broad and conspicuous, especially in front of the eye. The color of the upperparts ranges from brownish gray to gray-brown and that of the two pale wing bars from dusky white or buffy to grayish buff or brownish buff. The tail is black with grayish edging on the feathers, the outermost pair mostly white, the penultimate pair with a short to long narrow triangle of white on the tip of the inner web, and the next pair often with a small white spot at the tip. The wing lining and axillaries are dusky buff, and the underside of primaries and secondaries dark dusky.

The non-breeding plumage of the Water Pipit is acquired in late summer. It differs from that of other pipits by its *dark gray-brown to dark brown upperparts, without* pale streaks, and the broad blackish streaks *faint, indistinct and limited* to the crown and back; *uniform, pale buff to bright buff underparts*, with moderate to heavy black streaking on the breast and flanks; *dark legs*. Occasionally birds have two-to-four inconspicuous paler streaks on back. The eyebrow is buffy. The color and pattern of the wing bars and tail are as in breeding plumage. The upper tail coverts are a slightly warmer brown than the rest of the upperparts. The buffy malar stripe outlining the lower border of the ear coverts and the blackish malar line are usually well-defined. On the folded wing in fresh plumage, the longest tertiary reaches or nearly reaches the tip of the longest primary. Feather wear on the tertiaries is heavy, however, and a badly worn longest tertiary may fall as much as 16mm. (0.6 inch) short of the primary tip.

The first fall bird is like the non-breeding adult but the upperparts are browner, and often tinged chocolate; the eyebrow and underparts are a *darker, deeper pinkish buff*; often has *pale legs*.

#### *Other race*

Another race of the Water Pipit, *A. s. japonicus*, has occurred in fall on the islands of the Bering Sea (Vaurie, 1959; Dan Gibson, in *litt.*) and might reach there in spring. It breeds in southeastern Siberia, Sakhalin, the Kuriles, and Kamchatka (Vaurie, 1959). In breeding plumage, *japonicus* differs from *rubescens* in having slightly darker and somewhat browner upperparts, and pale brown legs. Non-breeding adults are like non-breeding *rubescens*, but the upperparts are a darker, more chocolate brown, and the legs are pale brown.

#### *Habits, vocalizations*

The Water Pipit is *strictly terrestrial*, only rarely perching on bushes or trees and normally feeding in open areas on tundra, fields, plains, muddy shores, etc. It nests on tundra. It pumps its tail down and up frequently. The flight call is a thin, sharp *peet* or *pit* or *chip* or *pi-pit* or *chip-it* or *pi-pi-pi-pit*. Its song, usually delivered while fluttering down to the ground from high in the air, is a clear or reedy musical note *chee* or *tchee* or double note *chawee* or *cheedle* rapidly repeated over and over at varying speeds.

## SPRAGUE'S PIPIT

#### *Distribution*

The Sprague's Pipit, *Anthus spraguei*, breeds on the northern Great Plains from northern Alberta to central Manitoba, south to Montana, North Dakota and northeastern Minnesota. It migrates through the Great Plains and winters from southern Arizona to northwestern Mississippi and south in Mexico to Michoacan, Puebla and Veracruz (American Ornithologists' Union, 1957). Vagrants both east and west of the Great Plains have been noted during migration, e.g., fall records in California (Dunn, 1976).

#### *Plumages and Identification*

The Sprague's Pipit can readily be differentiated from other pipits by *pale, rather plain buffy looking sides of head*; black streaks on underparts *confined to a necklace of narrow dark streaks across breast*, with *no* streaks on flanks; *paler upperparts*, especially hindneck, with bold dark streaking throughout; furtive habits; call.

The *dark brown eye* contrasts conspicuously with the *pale buffy eye-ring and lores* and generally pale sides of head. The pale buffy eyebrow is indistinct. The ear coverts are rather plain brownish buff to buffy brown, usually with a rufescent tinge. The sides and rear of the neck are *buff* with narrow dark streaks, and the crown *brownish buff* with sharply defined black streaks. The back and scapulars are *warm sandy brown or buffy brown* (often with a slight rufescent tinge), with *broad black streaks, broad buffy to brownish buff streaks* on the upper back, and a paler and more prominent buffy stripe down each side of the back. Narrow buffy brown to brownish buff feather edges give the back and scapulars a faint scaly appearance at close range (especially when the bird is freshly molted). The wings are blackish brown with whitish to buffy brown feather edging and two whitish to buffy wing bars. The rump and upper tail coverts, which look a little paler than the back, are warm sandy brown with narrow black streaks. The outermost two pairs of tail feathers are almost entirely white, the blackish brown confined to a band on the outer border of the inner web, giving the tail *more conspicuous white outer edges* than some other pipits. The rest of the tail is blackish brown with whitish to buffy brown edging on the feathers. The throat and malar area are pale buff to buffy white with a fine blackish malar stripe from the base of the mandible. The breast is *bright dark buff* with a necklace of narrow black streaks, the belly and under tail coverts buff to buffy white, the flanks brownish buff to buffy brown, *without* streaks (some individuals have a few fine dark brown streaks on lower flanks, but these are inconspicuous). The wing lining and axillaries are *white*, grading to dusky tips of outer primaries. The tip of the longest tertiary falls short of the tip of the longest primary on the folded wing by an average of about 10 mm (0.4 inch) but the gap ranges from 0-16 mm. The maxilla is blackish brown, while the mandible and legs are *bright flesh color or pale pinkish*, (brighter and more pink than in Plate 1)

Body molts occur in late summer and late winter. Newly molted birds are the palest, brightest and buffiest. Heavily abraded birds in summer and winter have darker upperparts and paler, duller buff underparts. Then the crown is blackish, with narrow buffy to brownish buff streaks, and looks like a blackish cap. The darker crown and back contrasting against the paler, buffy neck can give a "collared" appearance

Juvenal birds are like the adult but the scapulars and middle and lower back are black with *fine white scales* (feather edges) and narrow buffy streaks. As the feathers wear during the fall, the scales become less conspicuous and the birds come to look more like adults. All the Sprague's Pipits in the plates are in fairly fresh plumage. Wear and bleaching cause the buffy stripes on the head, neck and back to become narrower, duller and more whitish.

### *Habits, vocalizations*

The Sprague's Pipit is very furtive, creeping like a mouse in dense grass or other short vegetation. It is difficult to observe as it rarely feeds in the open and makes maximum use of whatever cover is available, standing behind plants and craning its neck to see the intruder. While this species usually travels in small flocks, it is rather solitary, and a flock spreads out broadly in a field, making it unusual to flush more than one or two at a time. After being flushed, its flight is undulating, with great swoops, each swoop carrying it higher. When alighting, it drops abruptly and steeply to near the ground in a larger swoop, and makes another smaller swoop or two before dropping steeply into the vegetation. Its preferred habitat is short grass prairie. It apparently does not pump its tail. Its flight call is a distinctive loud reedy *tweep* or *tsweep*, with a forced or explosive quality, often rapidly repeated. This call is louder and has a harder quality to it than the calls of the tree-pipits. Its loud song is delivered from high in the air, as high as 75 m. (250 ft.) above the ground, and is usually repeated many times. The song is introduced by a few reedy twittering *tze* notes, running into a reedy musical descending series of notes, starting with *tzee* or *twee* and running into a double note *tzee-a* or *twee-a*, the second note lower, and a final *twee-you!*, the final *you!* lowest in pitch and heavily accented: *tze-tze-tze-tze-tzee-tzee-tzee-tzee-tzee-tzee-tzee-a-tzee-a-twee-you!*

## RED-THROATED PIPIT

### *Distribution*

The Red-throated Pipit, *Anthus cervinus*, breeds across northern Eurasia from northern Scandinavia to the coasts of the Bering Sea. It winters in the northern half of Africa and southern Asia to the Philippines and Indonesia (Vaurie, 1959). In North America it is an uncommon to fairly common local breeder in the Bering Straits area of Alaska, a rare spring migrant (but see Gibson, 1979) and very rare fall migrant in the western Aleutians, and a casual spring migrant on the Pribilof Islands. There are, in addition, single records for Point Barrow and mainland Alaska south of the Seward Peninsula (Kessel and Gibson, 1978). This species is also found occasionally in the fall along the Pacific Coast: Washington (Mattocks and Hunn, 1980); northern California (Winter and Laymon, 1979); southern California (Small, 1974); and once at the southern end of Baja California (American Ornithologists' Union, 1957).

### *Plumages and Identification*

The non-breeding Red-throated Pipit is readily distinguished from the non-breeding Water Pipit by its *paler* brown upperparts, with *bold, sharply defined black streaking* from crown to upper tail coverts, and *four paler buffy* streaks down the

back, *pale legs*; *call*. Its *bold black streaks* on breast and flanks, darker upperparts, and *call* separate the non-breeding Red-throated Pipit from the Sprague's Pipit.

Non-breeding Red-throated Pipits have warm dark brown upperparts with *conspicuous, distinct black streaks*, broad on the back and narrow on the crown, nape, rump and upper tail coverts. There are *two buffy to buffy brown streaks* running down each side of the back, the outer one shorter, darker and less distinct, forming two broken "V" marks. These pale streaks range to buffy white in abraded plumage. There are two whitish to buffy wing bars, the upper one on the median wing coverts broader and more conspicuous as it contrasts with the exposed black feather bases. The ear coverts and the sides of the neck are rather plain brown, with some faint black streaks, and only a few faint paler streaks especially just behind the eye. A buffy malar stripe is sharply defined against the lower border of the ear coverts and the narrow black malar line that runs from the base of the bill into a patch of heavy black streaks on the lower sides of the neck. The eyebrow is buff. The underparts are fairly uniform warm or bright buff in fresh plumage, ranging to pale buff in abraded plumage, with heavy black streaking on the breast and flanks. The throat is occasionally buffy white. The tail is blackish brown with buffy to dark brown feather edging, the outermost pair of feathers mostly white, buffy white or dusky white, with the narrow outer web pale buffy brown, and the penultimate pair with a small whitish triangle at the tip of the inner web. The legs are yellowish brown to pinkish, the bill blackish brown with yellowish brown to yellowish flesh base of mandible. The hind-claw is slightly to noticeably longer than the hindtoe. In fresh plumage, the longest tertiary normally reaches or nearly reaches the tip of the longest primary on the folded wing. However on worn plumage the longest tertiary can fall as much as 11 mm. short of the wing tip.

Many males and some females in non-breeding plumage have *bright pinkish rufous* throat, malar area, lores and eyebrow, and a pinkish rufous tinge on the front part of the ear coverts, and occasionally a pinkish rufous tinge on the breast, as in breeding plumage. However, spring birds are rarely as heavily streaked on the breast and flanks. In some individuals, the bright pinkish rufous is limited to either the entire throat or just a trace on the throat.

In breeding plumage, the Red-throated Pipit is easily differentiated from all the other species dealt with here by the *bright pinkish rufous* throat, malar area and eyebrow which contrast with the *buffy* belly. Males and some females have the bright pinkish rufous extending onto the upper breast and many individuals have a bright pinkish rufous tinge to the forehead, cheeks, ear coverts and sides of neck. Black streaking on breast and flanks ranges from nearly none in the male to moderately extensive in the female. There is no black malar stripe and there are no black streaks on the side of the neck. The ground color of the upperparts ranges from warm dark brown (in fresh plumage) to gray-brown (in worn plumage), the latter giving the upperparts a "sandy" appearance.

Breeding plumage is acquired from late winter to early spring and non-breeding plumage acquired in late summer. Occasional birds in non-breeding plumage are seen in the spring, suggesting caution when trying to identify similar species such as



Olive Tree-Pipit (abraded)



Olive Tree-Pipit (fresh)



Brown Tree-Pipit (abraded)



Meadow Pipit (fresh)



Red-throated Pipit



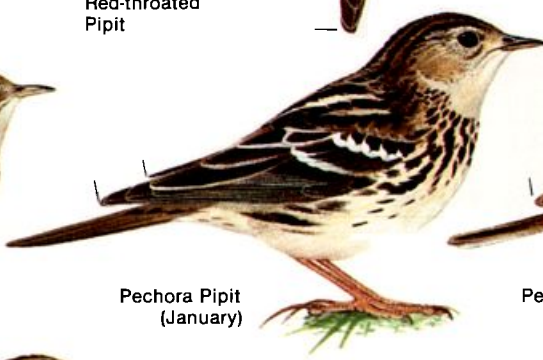
Pechora Pipit



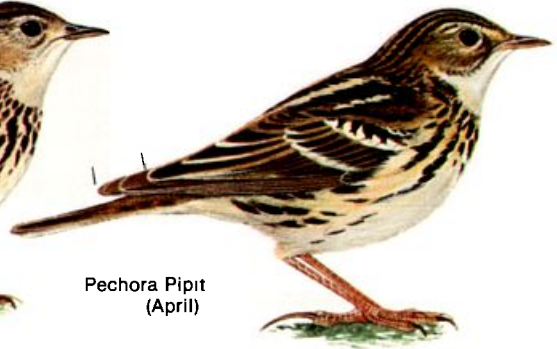
Brown Tree-Pipit (fresh)



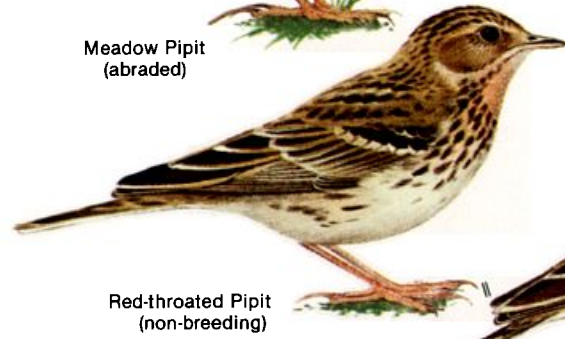
Meadow Pipit (abraded)



Pechora Pipit (January)



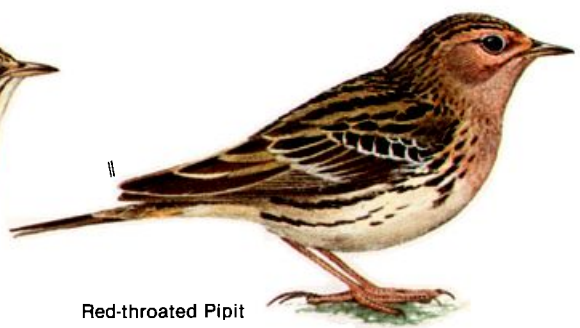
Pechora Pipit (April)



Red-throated Pipit (non-breeding)



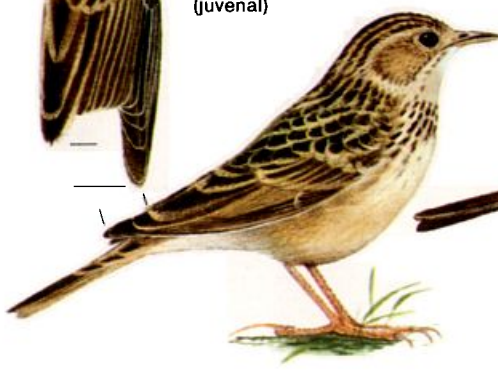
(♀ non-breeding)



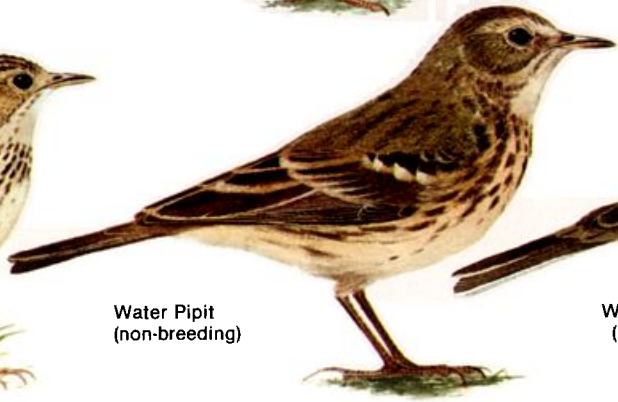
(♂ breeding)



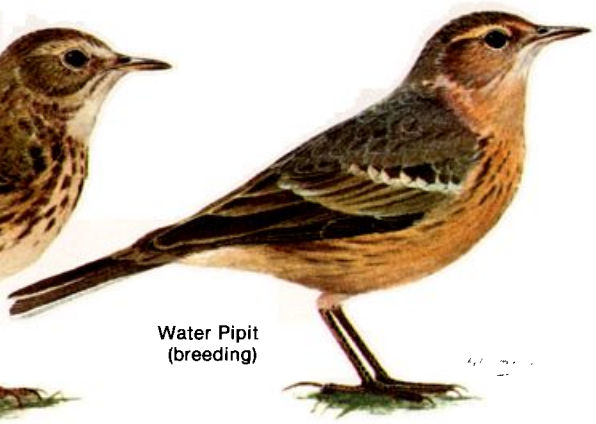
Sprague's Pipit (juvenal)



Water Pipit (non-breeding)



Water Pipit (breeding)



the Pechora Pipit and Brown Tree-Pipit First fall birds are like the non-breeding adult but have a slight rufescent tinge to the upperparts, brownish buff wing bars, richer buff underparts, and no trace of pinkish rufous in the plumage.

#### *Habits, vocalizations*

The Red-throated Pipit occasionally pumps its tail down and up. It can readily be observed as it normally frequents open areas and is not particularly shy. In Alaska, it is most often found in very short tundra vegetation and usually does not make much use of the available cover. On its wintering grounds in southern Asia, it prefers damp grassy areas, especially near marshes and in river valleys. Its flight call is a distinctive, thin high-pitched *seee, seeep*, or *see-eep*, with little or no reedy quality. Its song is "built up of three main types of component, *twee* (repeated about four times, shrill and prolonged, a little like closing notes of [Brown] Tree-Pipit, but not so musical and higher pitched, *trrrrrrrrr* (little bubbling trill), *twizz-wizz-wizz-wizz* (more sibilant, usually repeated several times), thus *twee-twee-twee-twee, trrrrrrrrr, twizz-wizz-wizz-wizz, twizz-wizz-wizz-wizz, twizz-wizz-wizz-wizz*. [A] single such sequence may form complete song from post or bush, but in song-flight—it is prolonged, with variations." (Witherby *et al.*, 1949).

### PECHORA PIPIT

#### *Distribution*

The Pechora Pipit, *Anthus gustavi*, breeds in the northern U S S.R. from the Pechora Region (just west of the Ural Mountains) to eastern Siberia and the Commander Islands. It winters in Indonesia (Vaurie, 1959). There are four records for North America, all in Alaska, three from St. Lawrence Island in the northern Bering Sea, and one from Attu, the westernmost of the Aleutian Islands (King, 1980). Because of its furtiveness and its close resemblance to other pipits, this is an unusually difficult Asian stray to record, and it may well occur more often than these few records indicate.

#### *Plumages and Identification*

In all plumages, the Pechora Pipit resembles the non-breeding Red-throated Pipit. Perhaps the best field marks for separating it from the Red-throated are the *call notes* and the *prominent, long white to buffy white* (rarely buff) *stripe* running down each side of the back, forming a broken "V". The whitish stripe is bordered on both sides by a broad black stripe, the contrast enhancing its visibility. This *single whitish stripe* of the Pechora Pipit is normally more conspicuous than the double buffy stripe of the Red-throated Pipit in a similar state of plumage wear. However, the distinction can be a subtle one due to variation in both species and may be confusing to an observer lacking field experience with one or both species. Close study of specimens shows that the freshly molted Pechora Pipit may have a second whitish stripe on the side of the back, which is outside the main one, and shorter and less conspicuous. This should be looked for in the field.

Another important plumage character distinguishing the Pechora from the non-breeding Red-throated is its *whitish throat* and *belly* which *contrast a little* with its buffy breast. Non-

breeding Red-throated Pipits that lack pinkish rufous on the throat, have *rather uniform* light to bright buff underparts. Caution is necessary as the fresh-plumaged Pechora often has a buffy to yellowish tinge to the lower throat, malar area and belly, although this does not diminish the contrast. The underparts of the Pechora Pipit are white to buffy white or creamy white, sometimes with a faint yellowish tinge in fresh plumage, with rich buff to yellowish buff breast in fresh plumage, becoming dull buff in abraded plumage. The under tail coverts are whitish to buffy. The breast and flanks are heavily streaked with black. On the folded wing, the longest tertiary normally falls about 10 mm. (range 7-13 mm.) short of the wing tip. This will distinguish it from many Red-throated Pipits, but caution must be used because worn Red-throateds often have shortened tertiaries.

Other differences between the Pechora Pipit and the non-breeding Red-throated Pipit tend to create a different "look", but these are gradations rather than clearly defined characters. The bill of the Pechora is somewhat longer and heavier. In fresh plumage, the Pechora often has a strong yellowish tinge to the sides of the head and neck, malar area, lower throat, breast, flanks and sometimes belly, which gives it a warmer, brighter look than the Red-throated. The sides of the head and neck are somewhat paler buffy brown with more buffy markings, the ear coverts less sharply defined on their upper and lower borders and the dark brown eye contrasting more with its paler surroundings. The narrow black malar line is *often broken and sometimes entirely lacking*. The crown and nape are somewhat paler and brighter buffy brown, often with a rufescent tinge, the black streaks more sharply defined and somewhat broader. The ground color of the crown and nape is usually paler than that of the back (the ground color of these areas tends to be the same shade on the Red-throated). The warm dark brown ground color of its back, rump and upper tail coverts often has a *rufescent tinge*, giving it a richer or warmer appearance, and the black stripes tend to be more sharply defined. With its bright plumage tones, the Attu bird (King, 1980) reminded North American observers of a Savannah Sparrow. The pale wing bars tend to be whiter (white to buffy white) and somewhat more sharply defined. The white of the outer tail feathers has a buffy or dusky tinge, sometimes stronger than on Red-throateds, but this appears to be of little value as a point of distinction as there is overlap in the "whiteness" of the outer tail feathers of Pechora and Red-throated, and in any case, it is almost impossible to get a clear view of the outer tail feathers in the field.

Will Russell noted a round black spot on the side of the neck near the juncture of throat and breast on the Pechora Pipit observed on St. Lawrence Island in 1975 (King, 1980). This mark was conspicuous when it craned its neck to look at the observers. A photograph of a Pechora Pipit trapped in September, 1976 at Fair Isle, United Kingdom, shows this mark (Fair Isle Bird Observatory Trust, 1977). Both Pechora and non-breeding Red-throated, have heavy black streaking in this area, connecting with the black streaks on the breast and continuing forward to form the thin black malar line. However, on the Pechora, this patch of broad black streaks is much smaller (1/8-1/4 inch or 3-6 mm. as compared to 3/8-1/2 inch or 9-13 mm. in diameter), and when the feathers are in the right position, a round black spot is formed. The lack of a black malar line on many Pechoras tends to isolate this black spot. Fur-



Water Pipit  
(breeding)



Water Pipit  
(non-breeding)



Olive Tree-Pipit  
(fresh)



Olive Tree-Pipit  
(abraded)



Brown Tree-Pipit  
(fresh)



Sprague's  
Pipit  
(adult)



Sprague's  
Pipit  
(juvinal)



Red-throated Pipit  
(non-breeding)



Pechora Pipit  
(fresh)



Meadow Pipit  
(fresh)

PLATE 2

ther, the patch of black streaks on a Red-throated is unlikely to look like a round black spot because it is more triangular in shape. This patch of black streaks is more likely to look like a black patch in both species on abraded birds when the pale edges of the feathers are worn away. Some careful field observation is needed to determine the usefulness of this mark in field identification.

The description of the Pechora Pipit is completed with the following. The eyebrow is buffy. The black streaks on the upperparts are broad and bold on the back, narrower on the crown and nape and narrowest and least conspicuous on the rump and upper tail coverts. The whitish wing bars differ in width, the one on the median coverts being broad and conspicuous, the lower one on the greater coverts being narrow and less conspicuous. The tail is blackish brown with buffy to dark brown feather edging, the outermost pair of feathers mostly buffy white to dusky white with the narrow outer web pale buffy brown near the tip, the penultimate pair of feathers with a short to long (half feather length) buffy white to dusky white triangle at tip of inner web. The long-looking legs are pinkish. The hindclaw is slightly longer than the hindtoe.

The adult Pechora Pipit molts its body plumage in late winter and early spring and, presumably, in late summer. Apparently the plumages of the breeding, non-breeding and first fall Pechora Pipit are much the same, with feather wear being the main cause of the plumage variation mentioned above. This variation can increase its similarity to the non-breeding Red-throated and cause confusion. However, the Pechora can normally be distinguished if great care is taken.

#### *Habits, vocalizations*

The Pechora Pipit occasionally pumps its tail down and up. It is a very secretive species, making extensive use of any cover in its way to avoid observation, and flying when approached too closely. Good views of the Pechora Pipit on the ground are normally obtained only by very careful stalking. In the breeding season the Pechora Pipit is found in "wet sedge and reed-grass meadows" and marshes, and "somewhat elevated tundra, not flooded at high water period and densely overgrown with shrubs" (Dement'ev *et al.*, 1954). On migration in Korea, I found it in "rice, bean, and wet grass and weed fields" (Fennell and King, 1964). In Alaska, it has been found on tundra, amidst the debris of a partially excavated midden, and feeding inside piles of twisted rusty metal matting used for surfacing airstrips (King, 1980). I frequently heard the call of the Pechora in Korea in 1961 and 1962. It is a distinctive, "hard, *pwit* or *pit*" (King and Dickinson, 1975) which always distinguishes it from the Red-throated. The song is "a high-pitched series of wheezy notes similar in quality to those of an insect" (Fennell and King, 1964), usually uttered in hovering flight as high as 40-60 meters (150-200 ft). Unfortunately the birds observed in Alaska called only rarely and softly and did not sing at all. With its extreme furtiveness and relative silence, the Pechora Pipit is most unpipit-like, especially to those familiar only with the Water Pipit.

## OLIVE TREE-PIPIT

#### *Distribution*

The Olive Tree-Pipit, *Anthus hodgsoni*, breeds from the Pechora Region of the U.S.S.R. east to Kamchatka and south to the western Himalayas, west China and Japan. It winters in southern Asia from India to Indochina and the Philippines (Vaurie, 1959). It is a casual spring migrant in the western Aleutians and at St. Lawrence Island (Kessel and Gibson, 1978), and was collected once near Reno, Nevada (Burleigh, 1968).

#### *Plumages and Identification*

The Olive Tree-Pipit is distinguished from all other pipits by **rather uniform, dark olive-green upperparts, without pale streaks; narrow black streaks** which are distinct on the crown, **extremely faint or lacking** on the rear and sides of the neck **distinct but faint** on the back (less conspicuous than on the crown), and entirely absent from the rump and upper tail coverts. The face pattern is diagnostic: a **yellowish buff patch** on the upper part of the lores, which runs into a **short, very conspicuous, creamy white eyebrow**, which is accentuated by a narrow black line above and a dark eyeline below it; a small, but conspicuous **buffy white patch** (often missing) on the upper rear part of the ear coverts, just below and behind the rear end of the eyebrow, which at a distance appears as a drooping extension of the eyebrow itself; a **small black patch** (rarely missing—below the buffy white one) connected to a narrow black line (sometimes missing) that runs forward along the lower edge of the ear coverts to a point beneath the eye; rather plain dark olive-brown ear coverts, which have a variable amount of buffy streaking on their front end, and are bordered below by a buffy malar stripe that curls around their rear edge. While difficult to see, the hindclaw, which is slightly **shorter** than the hindtoe, distinguishes this species from all other pipits except the Brown Tree-Pipit. For the original description of the face pattern, with a field sketch and a photograph, see Kitson (1979). For some field observations of the face pattern, see Fairbank (1980).

The plumage description of the Olive Tree-Pipit is completed as follows. The throat, breast and flanks are bright buff to yellowish buff, with a narrow black malar line down each side of the throat and heavy black streaking on the breast and flanks, the belly white to buffy white, and the under tail coverts buffy white to bright buff. The two wing bars are whitish to buffy. The tail is blackish brown with olive to olive-gray feather edging, the outer pair of feathers mostly buffy white to dusky white with the narrow outer web pale buffy olive-brown, and the penultimate pair with a whitish triangle at the tip of the inner web. On the folded wing, in fresh plumage, the longest tertiary normally nearly reaches the wing tip, but in worn plumage it can fall short by as much as 12 mm. The bill is blackish, the mandible basally flesh-colored, and the legs flesh-colored.

Adult Olive Tree-Pipits molt their body plumage in late summer and late winter. Freshly molted adults and first fall birds have the brightest olive upperparts and the brightest buff underparts. Adults in summer, having the most abraded and dull-colored plumage, have a strong gray to brownish tinge to the upperparts, giving an overall olive-gray to olive-brown look, although the wing coverts, rump, upper tail coverts and tail generally retain more of the olive-green tone. In addition, the buff of the underparts, malar area and forepart of the

eyebrow is much paler, ranging to buffy white, and the contrasting pattern on the sides of the head is faded and duller. The first fall bird is like the freshly molted adult but has a bronzy tinge to the upperparts and heavier black streaking on the back.

### *Habits, vocalizations*

One of the most distinctive characteristics of the Olive Tree-Pipit is that it *constantly pumps its tail down and up*, especially when perched in a tree or bush. When flushed, it normally *alights in trees*, or where there are none, it will fly onto a bush (or boards or oil drums at Attu in May 1979) or back to the ground. In its wintering grounds in southern Asia, it inhabits open wooded areas and forest edge. It feeds often in open fields, but normally near trees or tall bushes to which it flies when disturbed. On its breeding grounds it occurs in forests, forest edge and thickets, as well as alpine situations (Dement'ev *et al.*). The call is a *tseep* similar to the call of the Red-throated Pipit, but it is a little louder and has a distinctive reedy quality. The song (which I recorded in Hokkaido, Japan) is loud and musical with both clear and reedy notes, reminiscent of certain sparrow or bunting songs. It was delivered from a perch high in a tree and consists of variable phrases of 6-12 notes, with 5-10 seconds pause between phrases. A typical phrase is *witititu-tee-dash-eeyu*, the first four notes run together almost as a trill, the fourth note lower, the fifth note higher and the final double note inflected downward.

Choosing an English name for the Olive Tree-Pipit was complicated because of the numerous names available in the literature, the most important being: Olive Tree-Pipit, Indian Tree-Pipit and Olive-backed Pipit. Since the conspicuously extensive (and roughly equal) utilization of trees by *Anthus hodgsoni* and *Anthus trivialis* is highly unusual for pipits, it is appropriate, if not essential, that they both be called "tree-pipits." Their claim to the distinctive group name "tree-pipit" is enhanced by their short hindclaws, an adaptation to arboreal living, also unusual in pipits. The major books on Asian birds call *A. hodgsoni* a tree-pipit, albeit with different modifiers. The major Eurasian bird books also call *A. trivialis* a "tree-pipit". Thus the English name "tree-pipit" is firmly established for both species and "tree-pipit" becomes a group name requiring a distinctive modifier for each species. I coined the names "Olive Tree-Pipit" for *A. hodgsoni*, first used in "A Field Guide to the Birds of South-East Asia" (King and Dickinson, 1975) and "Brown Tree-Pipit" for *Anthus trivialis* for use in my forthcoming book on the birds of the Indian Region, because these names indicate the birds' arboreal habits as well as one of the most important means of distinguishing the two species, namely the olive and brown shades of their upperparts. The name "Indian Tree Pipit" for *A. hodgsoni* gained currency through Vaurie (1959) but is not used in India (where they use Hodgson's Tree Pipit; Ripley, 1961) and is inappropriate because its breeding there is confined to the extreme northern part of only one state, Uttar Pradesh, high in the Himalayas. The name "Olive-backed Pipit" was proposed for *A. hodgsoni* in about 1966 for use in Great Britain where the bird is accidental. While this name does point out the olive back color and obviate the necessity for a modifier for the English name of *A. trivialis*, it is inappropriate because it fails to call attention to the bird's arboreal habits.

## **BROWN TREE-PIPIT**

### *Distribution*

The Brown Tree-Pipit, *Anthus trivialis*, breeds from Europe east to Lake Baikal in south central Siberia, and the western Himalayas. It winters from tropical Africa and the Mediterranean region to India (Vaurie, 1959). There is one unpublished record for the Seward Peninsula of Alaska in June. Because this species does not breed in the far eastern areas of the U.S.S.R., it must be regarded as strictly accidental in North America.

### *Plumages and Identification*

The Brown Tree-Pipit is similar to the Olive Tree-Pipit but may with care be distinguished by *somewhat paler, brown* upperparts, with only a faint olive tinge; *broader, more clearly defined and more conspicuous black streaks* from crown to back; *distinct* black streaks on the back of the neck, and often the sides of the neck as well; *plainer*, somewhat paler, less contrasting sides of head; *narrower, less conspicuous* buffy eyebrow, which is the *same* color throughout, lacking the yellowish buff above the lores; somewhat paler brown ear coverts, with less sharply defined upper and lower borders, *lack* of white and black patches on rear end, and lack of the black line on lower border; somewhat narrower and less bold black streaks on the breast and flanks; less frequent tail pumping, slightly longer looking tail.

While a Brown Tree-Pipit in freshly molted plumage is not difficult to differentiate from the Olive Tree-Pipit, the identification of abraded summer adults can be troublesome since feather wear in the Olive Tree-Pipit dulls the characteristic green tone of its upperparts leaving them looking browner and grayer, while the underparts are paler buff, the face pattern faded, and there remains little contrast between the fore and the rear part of the eyebrow. Feather wear on Brown Tree-Pipits causes their upperparts to look somewhat darker and sometimes more olive in tone, and the buff of their underparts and eyebrow to fade to pale buff. Thus the two tree-pipits tend to look more alike when their plumage is badly worn. Adult Brown Tree-Pipits molt their body plumage in late summer and later winter. Freshly molted birds have the brightest buff underparts and eyebrow.

The Brown Tree-Pipit can be differentiated from Pechora and non-breeding Red-throated pipits by the *lack of or faint* pale stripes on the back (these pale stripes can be fairly conspicuous in worn summer plumage); *unstreaked* rump and upper tail coverts; a hindclaw that is slightly *shorter* than the hindtoe, and more strongly curved; different call. Its bill is somewhat stouter than that of the Red-throated Pipit. Most individuals have some dark feather centers on the rump and upper tail coverts which show as faint dark marks, but *not* distinct streaks. Occasional individuals have one (or rarely two) more conspicuous buffy streaks on each side of the back, but these are rarely as pale or as striking as those of the Red-throated Pipit.

The Brown Tree-Pipit has a clear, distinct, pale to bright buffy malar stripe, *without* any black markings, between the ear co-



Table 1. Identification of the pipits of North America

All seven species are 6-7 inches (15-18cm.) in length and have thin warbler-like bills, slender build, dark upperparts, pale underparts, pale eyebrows, two pale wing bars and dark tails with white or whitish outer tail feathers. They walk, rather than hop, and have an undulating flight. They feed on the ground in open country. However, tree-pipits use trees for singing and refuge, and are often found in wooded areas.

Species	Ground color of back	Black streaks on back	Black streaks on rump and upper tail coverts	Pale streaks on back	Color of underparts	Blackish streaks on underparts	Call	4th primary shorter than 3rd primary by	Hindclaw length relative to hindtoe	North American range; status
Water Pipit Non-breeding	dark brown	broad faint indistinct	none	none	bright buff	moderate to heavy on breast and flanks	thin, sharp <i>peet</i> , or <i>pi-pit</i> or <i>pi-pi-pi-pit</i>	0-2 mm.	longer	widespread; common
Breeding	pale grayish	broad faint indistinct	none	none	dark pinkish buff	light on breast and flanks				
Olive Tree-Pipit	dark olive-green	narrow faint distinct	none	none	bright buff throat and breast; white belly	heavy on breast and flanks	reedy <i>tsweep</i>	0-3 mm.	shorter	Alaska; casual
Brown Tree-Pipit	warm brown	medium conspicuous distinct	none to faint	none or faint	bright buff throat and breast; white belly	heavy on breast and flanks	similar to Olive's	2-5 mm.	shorter	Alaska; accidental
Meadow Pipit	olive-brown	medium conspicuous distinct	faint	none or faint	buff throat and breast; buffy white belly	heavy on breast and flanks	squeaky <i>tsweep</i>	0-2 mm.	longer	Greenland; breeds
Pechora Pipit	rufescent dark brown	broad conspicuous distinct	narrow distinct conspicuous	two, whitish	creamy white throat and belly; buffy breast	heavy on breast and flanks	hard <i>pit</i> or <i>pwit</i>	3-5 mm.	longer	Alaska; rare
Red-throated Pipit Non-breeding	warm dark brown	broad conspicuous distinct	narrow distinct conspicuous	four, buff	warm buff	heavy on breast and flanks	thin, high <i>seeep</i> or <i>seeep</i> or <i>seeep</i>	0-3 mm.	longer	West Coast; rare
Breeding	gray-brown to warm dark brown	broad conspicuous distinct	narrow distinct conspicuous	four, buff	pinkish rufous throat; warm buff breast and belly	nearly none to some on breast and flanks				Alaska; breeds
Sprague's Pipit	buffy brown	broad conspicuous distinct	narrow distinct conspicuous	many brownish buff	throat and belly buffy white; dark buff breast	necklace on breast; none on flanks	loud, reedy <i>tsweep</i>	0-2 mm.	longer	Great Plains; local

verts and the narrow black malar line. Its throat, breast, flanks, and often under tail coverts are bright yellowish buff, which *contrasts* with the white of the belly, except on some heavily abraded birds in which the buff is badly faded. The belly often has a buffy tinge. There are two whitish to buffy wing bars. The tail resembles that of the Olive Tree-Pipit but the feather edging is buffy brown to dark brown or olive-brown, and the narrow outer webs of the outermost pair of feathers are buffy brown. On the folded wing in fresh plumage, the longest tertiary falls on or just short of the wing tip. In worn plumage the longest tertiary can fall short of the longest primary by 13 mm. The bill is blackish brown, except for the flesh-colored base of the mandible, and the legs are brownish flesh.

Brown Tree-Pipits in the first fall plumage, which is acquired in late summer, resemble adults but have a warmer, somewhat paler, buffy tinge to the upperparts; bright warm buffy wing bars; bright warm buffy eyebrow, malar area and underparts, with the center of the belly a pale buff to buffy white. The juvenal plumage is similar to the first fall plumage but has a strong rufescent tinge on the upperparts which sometimes carries into the first fall plumage as a faint tinge.

#### *Habits, vocalizations*

The habits of the Brown Tree-Pipit are similar to those of the Olive Tree-Pipit, but it pumps its tail *much less frequently* and is perhaps slightly less dependent on trees. The flight call is a penetrating hoarse *teeze*, similar to that of the Olive Tree-Pipit. The song is a "single phrase consisting of usually some 2-4 different notes or simple components each repeated several times, leading up to shrill, musical, canary-like *seea-seea-seea* . . . with which song finishes, and which is sometimes preceded by little bubbling trill . . . In song flight male flutters steeply upwards from elevated perch on tree, begins singing near peak of ascent and continues as it floats down, with wings inclined upwards and tail spread, to same or adjacent perch again, or sometimes to ground . . . frequently delivers whole or curtailed version while perched, exceptionally even on ground." (Witherby *et al.*, 1949).

### MEADOW PIPIT

The Meadow Pipit, *Anthus pratensis*, breeds in southeastern Greenland and Iceland, as well as Europe. In winter, it migrates as far south as North Africa and the Near East, and as far west as Turkestan, northern Pakistan and Kashmir (Vaurie, 1959; Ripley, 1961). Since it has occurred accidentally as near as western Greenland (American Ornithologists' Union, 1957), it seems a likely candidate for vagrancy elsewhere in eastern North America.

#### *Plumages and Identification*

The Meadow Pipit is much like the Brown Tree-Pipit, and is extremely difficult or impossible to differentiate on plumage characters alone. This is especially true in the autumn when the first fall Meadow Pipits look even more like Brown Tree-Pipits. The flight call is the best and easiest way to separate them in any plumage. Other helpful field marks for separating the Meadow Pipit from the Brown Tree-Pipit are: hindclaw that is *longer* than the hindtoe and less strongly curved; *more*

*open, grassy* habitat; *rare* use of trees, *usually returning to the ground* after being flushed. On the breeding grounds, identification is made easier by the differences in the habitat, song and song-flight.

The other ways of differentiating the Meadow Pipit from the Brown Tree-Pipit must be considered merely suggestive or supportive, rather than definitive, because the plumages of these two species are so similar that it is difficult to see the differences, and variation produces overlap in appearance. The Meadow Pipit differs from the Brown Tree-Pipit by somewhat less erect, more "hunched," carriage; somewhat shorter, less elongated look; slightly smaller size, giving a somewhat "lighter" appearance, and less "confident" progress in flight; slightly thinner bill; *somewhat darker, more olive-brown* upperparts, with *somewhat bolder, more distinct black streaks* on crown, hindneck and back, which extend onto upper rump, *less distinct and less clean-cut* buffy malar stripe, with some small blackish markings and less regular borders; usually paler, duller buffy throat and breast; stronger buffy tinge on belly; less contrast between buffy breast and buffy white belly; slightly narrower, but somewhat more numerous black streaks on the breast and flanks; pale brown to dark fleshy legs, which are less pink in tone than in the Brown Tree-Pipit. Much caution is required when trying to separate the Meadow Pipit from the Brown Tree-Pipit by plumage characters alone as individual and seasonal variation in both species often brings the color of their upperparts close to one another and there is broad overlap in the intensity of the buff of the underparts and the size and extent of the black streaks on the upperparts, breast and flanks.

The Meadow Pipit has two buffy wing bars; buffy white to bright buff throat, breast, flanks, and under tail coverts, with heavy black streaking on breast and flanks; buffy white belly. The tail of the Meadow Pipit is like those of the Brown Tree-Pipit and the Olive Tree-Pipit, but the feather edging averages slightly more olive in tint than in the Brown Tree-Pipit and slightly browner than on the Olive Tree-Pipit. Adult Meadow Pipits molt their body plumage in late summer and late winter and the breeding and non-breeding plumages are much the same. Fresh-plumaged birds often have the throat, breast and flanks bright buff, some nearly as bright as fresh-plumaged Brown Tree-Pipits. Abraded summer Meadow Pipits have somewhat darker upperparts and buffy white underparts.

The first fall plumage of the Meadow Pipit is acquired in late summer and is like that of the adult but the upperparts are warmer, slightly paler brown, occasionally with a faint rufescent tinge, and the black streaks are somewhat broader; the wing bars are brownish buff; the underparts are a warmer, brighter buff. This plumage is closer to the Brown Tree-Pipit and much caution must be used in making the identification. The juvenal plumage of the Meadow Pipit is like the first fall plumage but has a slight rufescent tinge on the upperparts and a pale yellow tinge on the underparts.

The Meadow Pipit is distinguished from the Olive Tree-Pipit by *browner* and somewhat paler upperparts, with *distinct, conspicuous black streaks* from crown to upper rump, including hindneck; plainer, less contrasty sides of head; *inconspicuous* buffy eyebrow, *without* bright buff area on upper part of lores; *plainer* ear coverts, without the white and the black pat-

ches; less clear and less distinct buffy malar stripe; paler buff on underparts; less tail pumping; long hindclaw.

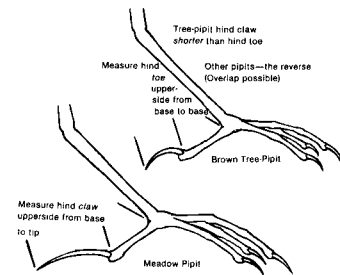
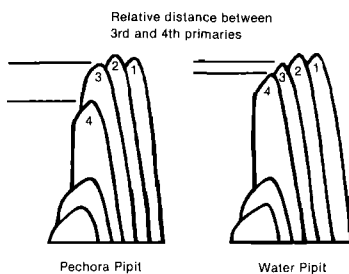
The Meadow Pipit can be differentiated from the Pechora and non-breeding Red-throated Pipits by the *lack of or faint* pale stripes on the back (although these pale stripes can be fairly conspicuous in worn summer plumage); stronger olive tinge to upperparts, *including* wings; *somewhat narrower* and less clearly defined black streaks on upperparts and underparts, especially on the back and flanks; the *lack of or faint* black streaks on lower rump and upper tail coverts; voice. The Meadow Pipit's bill is somewhat smaller than that of the Pechora Pipit, and the brownish flesh base of the mandible is usually more extensive and paler than that of the Red-throated Pipit. Occasional Meadow Pipits have one (or rarely two) more conspicuous dark buffy stripes down each side of the back, but these are rarely as prominent as those on the Red-throated Pipit. On the folded wing in fresh plumage, the longest tertiary normally falls at or just short of the wing tip and covers it, but in worn plumage, the longest tertiary can fall as much as 13 mm. short of the longest primary.

The Meadow Pipit can be easily separated from non-breeding

Water Pipits by more olive, more contrasting upperparts with *conspicuous, distinct black streaks* from crown to upper rump; *less* conspicuous buffy eyebrow; paler buffy underparts, with more distinct black streaks on breast and flanks; *pale* legs; call. The Meadow Pipit is readily differentiated from the Sprague's Pipit by *darker*, less contrasting upperparts, *without* conspicuous pale streaks; *heavy black streaking* on breast and *flanks*.

#### Habits, vocalizations

The Meadow Pipit is an open country bird, inhabiting grassy areas, marshy areas, sand dunes, shores, etc. It stays mostly on the ground and, when flushed, usually returns to the ground, although occasionally it perches in trees. Its flight call has many variations around a high-pitched, squeaky *tseep* usually repeated as it flies up after being flushed, or a louder *tissip*. The song is occasionally sung from a perch on a bush or fence, or the ground, but is usually delivered while fluttering in the air, during both the ascent from the ground and the descent back to the earth. It is a "tinkling sequence of similar, rather thin, feeble notes resembling call, gathering speed as the bird rises, and succeeded on the descent by succession of a slightly more musical notes ending in a trill." (Witherby *et al.*, 1940).



THESE SEVEN PIPITS are much the same size, their wing lengths ranging from 73-95 mm.; tails 45-64 mm.; bills 13-17 mm.; tarsi 20-26 mm. The hindclaws of the two tree-pipits measure 7-10 mm. and are strongly curved, while the other five have longer, less strongly curved hindclaws that measure 9-15 mm. The length of the fourth primary (counting from the outside) in relation to the third primary is a helpful character in specimen diagnosis. See the accompanying identification table for a summary of this measurement. Hall (1961) provided most of the measurements

and her analysis was very useful in preparing this paper. Hall's paper includes complete series of measurements for all the species of pipits as well as much descriptive material and means for the identification of pipits in the hand.

In summary, all these pipits can be identified in the field, but often only with extreme care, and some of the more difficult identifications require a good deal of field experience as well. I would very much appreciate comments and criticism from those who use this identification material in the field.

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