incubate. The young hatch in three to four weeks and are precocial—born with eyes open and capable of leaving the nest soon after drying. The young feed themselves but are accompanied by the adults until fledging occurs in four to five weeks.

Upland Sandpipers hunt by sight, and their foraging typically involves short runs followed by a pecking bout when a prey item is sighted. Their diet is more than ninety percent insectivorous, with a wide variety of terrestrial invertebrates consumed. They will, however, eat weeds, seeds, and waste grain following harvest.

Upland Sandpiper populations peaked in the mid-nineteenth century, when most of New England was farmland. They unfortunately became a favorite target of the market hunters in the 1880s about the time when Passenger Pigeons became rare. In the west populations declined as the prairie was converted to farmland, but recovered somewhat as they adapted to agricultural conditions. In New England populations have declined in the twentieth century as farmlands have reverted to woodlots. The Upland Sandpiper is but one of many grassland species that have been seriously declining in the east. With continuing loss of habitat in the United States, continued massive use of pesticides in agricultural areas, and problematic conditions on their wintering grounds in South America, their future is uncertain. One can only hope that these elegant birds will continue to raise their wings aloft on the fence posts of our roadways into the indefinite future.

W.E. Davis, Jr.

## ABOUT THE COVER ARTIST

Barry Van Dusen last provided cover art for the October 1994 issue. He was the illustrator for A Birder's Guide to Eastern Massachusetts and Birds of Massachusetts. He can be reached at 13 Radford Road, Princeton, MA 01541.

## AT A GLANCE February 1995 \_\_\_\_\_ Wayne R. Petersen

To assist in identifying February's puzzler, it is useful to have a fundamental understanding of general passerine plumage characteristics and plumage acquisition. In general, the majority of North American songbirds wear at least four to six more or less distinct plumages during the course of their lifetime. Variations of this rule are many, however, and often differentiating subtle characteristics between certain plumages can be difficult. Fortunately, the sequence of plumage acquisition is pretty much the same for most species.

When first out of the egg, many nestlings have a soft downy covering. This down covering is rapidly replaced by the first true coat of feathers—the juvenal

plumage. In most species this juvenal plumage is partially replaced during the early fall by a partial molt that normally includes the head and body feathers and often the lesser and middle wing coverts. Although notable exceptions do exist, this generalized molt pattern is how the majority of species acquire their first-winter plumage. When this first-winter plumage differs from that of an adult bird at the same season, the bird is said to be an immature. Technically, the term adult does not apply until the bird acquires a plumage worn exclusively by adults. By this definition, some songbirds (e.g., American Redstart) are still immatures when they are nearly twelve months old because their spring molt into first-summer plumage does not produce a plumage like that of adults.

Eventually, the majority of passerine species will undergo a complete molt in late summer that will ordinarily replace nearly all of the body and wing feathers, thus taking the bird into its adult winter plumage. The following spring, such birds will acquire their adult summer plumage by means of another partial molt of head and body feathers. From then on, most songbirds will have two molts a year: a partial one in spring and a complete one in fall.

Recognizing some plumages, especially juvenal plumages, is often straightforward. Birds in juvenal plumage often display body feathers and wing coverts that are conspicuously streaked, spotted, speckled, or tipped with white or buff. This effect is readily seen in American Robins, Cedar Waxwings, and Chipping Sparrows, as well as in many shorebird species. Eventually these pale markings wear off or the feathers are replaced through molt, thus yielding the first-winter plumage.

The birds in the photo are probably juveniles because they are heavily speckled. Their rather tapered and flattened bills remove sparrows and other seed-eaters as possibilities, while their conspicuous eye rings suggest a flycatcher species. The birds, however, are not postured like flycatchers, and their heads appear too small, and their tails do not seem long and slim enough. And when did you ever see a flock of flycatchers in a bird bath?



Photo by Frank H. Wood. Courtesy of MAS.

The giveaway in the photograph is the bird facing the camera at the right of the picture. Its frontal view reveals incoming solid color of the breast, white lower belly, small-headed appearance, and upright stance of the beloved American Bluebird (Sialia sialis). bespectacled and spotted appearance of the juveniles is typical of family groups in late summer.



Can you identify this bird?

Identification will be discussed in next issue's AT A GLANCE.

