The Practiced Eye

Kenn Kaufman

Photographs from VIREO

The Practiced Eye is a new photographic feature of AMERICAN BIRDS whose purpose is to focus closely on distinguishing characteristics observable to the attentive birder in the field. We plan to run The Practiced Eye in seasonal issues of AB, in keeping with our increased emphasis on field identification. Kenn Kaufman, quintessential field birder as well as AB's Regional Reports Editor, has agreed to both author this column and choose the best photos available from the VIREO collection at The Academy of Natural Sciences in Philadelphia, to illustrate each identification problem he discusses. We hope you enjoy this new feature. Let us hear from you with suggestions for future topics or puzzle species.——S.R.D.

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Cassin's Finch versus Purple Finch



Adult male Cassin's Finch. Photo: Allan D. Cruickshank/VIREO (c02/2/112)



Adult male Purple Finch. Photo: O. S. Pettingill, Jr./VIREO (p03/1/480)

HE PURPLE FINCH (CARPODACUS PURPUREUS) IS A common breeding bird from the northeastern United States across the forested regions of Canada and south through the Pacific states to northern Baja; in winter, its range in the East extends south to the Gulf coast. This distribution leaves a large hiatus in the Rocky Mountain and Great Basin areas, and here the Purple Finch is replaced by the similar Cassin's Finch (Carpodacus cassinii). The two species overlap extensively in the Pacific states.

A well-known relative of these two is the House Finch (Carpodacus mexicanus)—widespread in the West, introduced and spreading like wildfire in the East, and perhaps destined someday to inhabit every North American back-

yard. It differs from Purple and Cassin's finches in a variety of ways. Although all three species have about the same overall length, the House Finch is a proportionately smaller-bodied, slimmer bird with a longer tail and a smaller, stubbier bill. Other distinctions are shown well in the standard bird guides. This series of photographs will focus on separating Purple and Cassin's finches.

Cassin's Finch and Purple Finch are both chunky birds with relatively short, deeply-notched tails. Cassin's is slightly larger than Purple, but in the field—as in photographs—this difference is not evident unless the two species are seen together.

With practice, one can learn to discern a difference in



Adult male House Finch. Photo: Dale & Marian Zimmerman/VIREO (201/4/191)



Pair of House Finches (female above). Photo: R. Villani/VIREO (v05/3/020)

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bill shape: slightly longer, with a straighter culmen (ridge of upper mandible), in Cassin's Finch; slightly shorter, with a more curved culmen, in Purple Finch (especially in the eastern populations).

Another useful distinction, one not conveyed in photographs, is the difference in flight calls: the Purple Finch gives a light, metallic *pik*, while Cassin's Finch delivers a dry *giddy-up*.

Males of both species attain their rosy adult plumage in the autumn of their second year. The adult male Cassin's



Adult male Cassin's Finch. Photo: Helen Cruickshank/VIREO (c03/7/433)



Adult male Cassin's Finch. Photo: Dale & Marian Zimmerman/VIREO (201/9/042)

has a bright red crown, contrasting sharply with the rest of the plumage, and the crown feathers are often erected to form a short spiky crest. A paler pink wash extends over the rest of the head, back, rump, and upper breast. The reddish wash on the adult male Purple Finch is darker and far more uniform and extensive, covering the entire upperparts, head, and breast, interrupted only by the underlying brown pattern.

The adult male Cassin's has fine dark streaks on the sides and flanks, usually appearing more prominently on the undertail-coverts. On the adult male Purple Finch the flanks are virtually plain, with just a hint of blurry streak-

ing, and the undertail-coverts are unmarked white.

The upper back (just below the nape) is streaked with brown in adult males of both species. In Cassin's Finch, the streaks are narrow and sharp, on a whitish background, in Purple Finch, the streaks are more broad and diffuse on a reddish background.

Females and immature males of Purple and Cassin's finches are brown-and-white birds, more distinctly marked on the face and underparts than the female House Finch.

Comparing female-plumaged birds of the two species,



Adult male Purple Finch. Photo: J. R. Woodward/VIREO (w04/2/030)



Adult male Purple Finch. Photo: Helen Cruickshank/VIREO (c03/7/420)

Cassin's Finch tends to be *more* distinctly marked on the underparts, and slightly *less* distinctly marked on the face, than Purple Finch.

On Purple Finch the streaks are short but broad, creating a blotchy effect on the upper breast. On Cassin's Finch the streaks tend to be narrower and more sharply defined, and usually give the impression of being darker, on a whiter background.

The undertail-coverts are streaked in Cassin's Finch, usually unmarked white in adult Purple Finch. Use this field-mark with caution, however: juvenile Purples do have streaks in this area. This plumage is seen only in summer,

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but some first-winter immature Purples and even some adult females can show faint streaks on the undertail-coverts.

Female Purple Finches always show a strong face pattern, with a dark brown cheek-patch bordered by white above and below. Female Cassin's are more variable: some (as seen here) show almost as much contrast as the Purple Finch, while others are almost as plain-faced as the House Finch.

Female Cassin's Finches look more sharply streaked on the nape and upper back than female Purples, because the basic ground color of these areas is paler (whitish instead of olive-brown) on Cassin's, causing the streaks to stand out more.



Female-plumaged Cassin's Finch. Photo: Dale & Marian Zimmerman/VIREO (201/9/050)



Female-plumaged Cassin's Finch. Photo: Allan D. Cruickshank/ VIREO (c02/2/118)

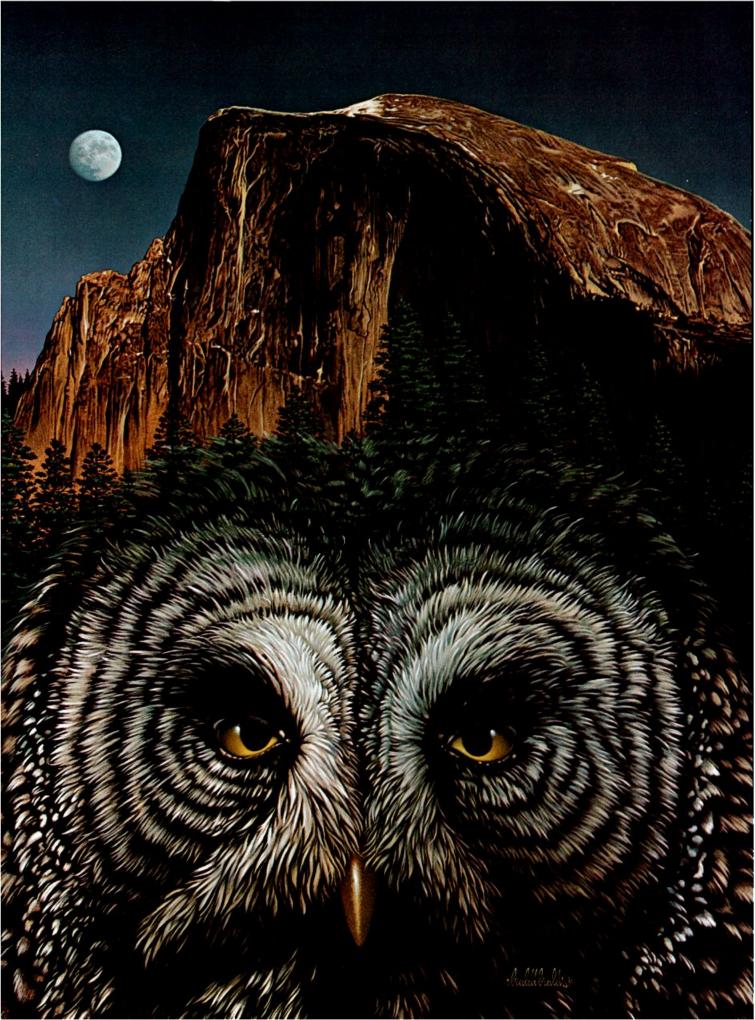


Female-plumaged Purple Finch. Photo: J. R. Woodward/VIREO (w04/4/038)



Female-plumaged Purple Finch. Photo: Crawford H. Greenewalt/ VIREO (g02/24/155)

VIREO (Visual Resources for Ornithology), at the Academy of Natural Sciences of Philadelphia, is the world's first and foremost scientifically-curated collection of bird photographs. Established in 1979, the collection now holds well over 80,000 images, representing over one-third of the world's bird species. For more background, see the feature on VIREO by Myers et al. in American Birds Volume 38, Number 3, May–June 1984.



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