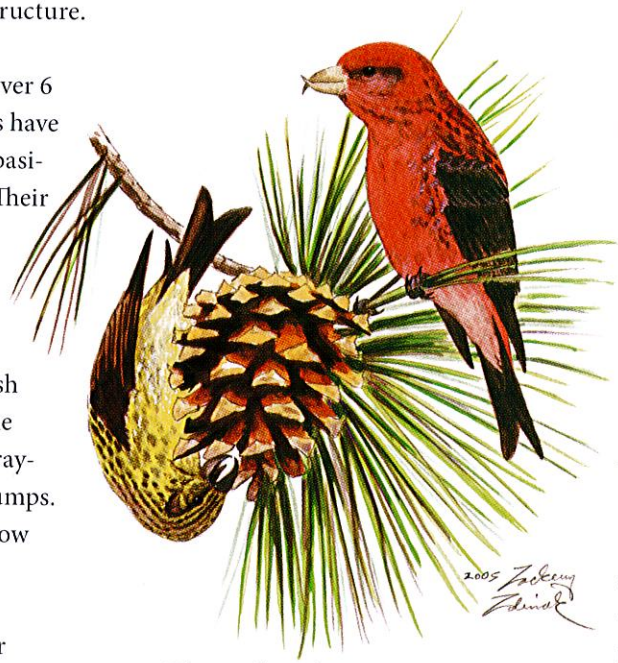
Red Crossbill

Scientific Name: *Loxia curvirostra.* From the Greek *loxos* meaning crosswise, Latin *curvus* meaning curved and Latin *rostrum* referring to the bill. The name refers to the bird's unique bill structure.

Description: Averaging just over 6 inches long, these stocky finches have short, deeply notched tails and basically solid-colored dark wings. Their dark bills are thick and short, with the narrower tips distinctively curved and crossed. Although plumage color is variable, most adult males are reddish overall with grayish bellies, while females are uniformly olive to grayish with yellowish breasts and rumps. Juveniles are brownish, paler below with heavy dark streaking.

Distribution: Although rather nomadic due to the variable nature of pine cone productivity, red crossbills occur at least irregularly in most conifer forests in the state at elevations ranging from 6,400 to 11,000 feet. However, during years of low cone production, small flocks occasionally descend to lower elevations in search of food during the fall and winter. These irregular flights periodically take them even into desert regions of the state. Here they frequently take up winter and early spring residence in isolated stands of exotic aleppo pines in city parks, cemeteries and school yards where pairs occasionally nest.

Habitat: Due to their restricted diet, crossbills primarily inhabit forests dominated by mature conifers, including pines, firs and spruces. In Arizona, they are most frequently encountered in forests dominated by ponderosa pine and Douglas fir. However, they also regularly occur in spruce-fir and pine-oak forests, and less often in adjacent pinyon pine woodlands.



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Biology: Red crossbills spend much of their time acrobatically clambering over pine limbs. They often hang upside down as they use their unique bill and tongue to extract pine seeds from cones, their principle food. Pine seed abundance is the most important factor influencing timing of nesting, which often begins in mid-winter and can extend into the summer.

Males frequently start to sing in late fall and early winter, with some females starting to construct nests in January. Nests are well concealed in dense cover. They are often built 15 or more feet above the ground. Nests are typically shaded by leaning trunks or overhanging branches, which may help limit snow accumulation and insulate the nest from cold.

Only the female incubates the two to four eggs laid, but the male often feeds her during this nesting period. The eggs hatch in approximately 14 days. Both adults feed the nestlings, which leave the nest when they are 15–25 days old. If pine seeds remain abundant, the male often takes full responsibility for feeding the fledglings, while the female lays a second egg clutch. Depending on food availability, crossbills can produce between two and four broods per year, with nesting efforts occasionally continuing for six to nine months.

Status: Red crossbills are not a species of concern in Arizona, though there has recently been extensive loss of habitat due to wildfires and bark beetle infestations. Although periodically locally common, their distribution and abundance in Arizona can vary widely from one year to the next. Population fluctuations are closely related to the variable annual abundance, quality and location of pine seeds.

Management: The primary threat to this species in Arizona is habitat loss. Conservation of forests with mature, cone-bearing trees would benefit not only this unique finch, but many other conifer-dependent species. Research on the effects of forest thinning is important for the preservation of habitat.

■ Nongame avian biologist Troy Corman's "field time" is typically what he can salvage on weekends, which he often spends birding.

Illustration by Zackery Zdinak