

First Documented Nesting of White-winged Crossbill (*Loxia leucoptera*) in Massachusetts: The Invasion of the Cone Slashers

Geoffrey S. LeBaron

It is fascinating how an innocent comment can set the wheels in motion leading to ornithological discoveries. In July of 2000 the members of the Hampshire Bird Club in Berkshire County received a tantalizing report from our President, Mary Alice Wilson. She suspected she had located a breeding locality for Swainson's Thrushes in the deep spruce/hemlock forests of Colrain State Forest in Colrain and the adjoining Cook State Forest in Heath. In the context of her description, she mentioned that White-winged Crossbills were also present at the same location. While the Swainson's Thrush report was of interest due to the species' status as a rare breeder in this state, the presence of White-winged Crossbills in July also seemed quite unusual — and the latter species remained absent from my year 2000 bird list, unlike the Swainson's Thrush! Thus I undertook a trip of two-pronged investigation to those lovely, deep forests. While I missed Swainson's Thrushes on subsequent visits, there were many White-winged Crossbills throughout the forest, mostly small groups of immature birds accompanied by one or two adults. These roving flocks of crossbills notably preferred the cones of native spruces to the intermixed stands of introduced Norway spruce, although cones were abundant on nearly all spruces. It seemed quite likely that they had bred somewhere nearby in the recent past, but this location is adjacent to the Vermont state line, and immediately to the north are the great expanses of the Green



DAVID SMALL

Mountain National Forest, a potential fertile breeding ground for crossbills. It seemed entirely possible — although not certain — that these birds could have moved a short distance southward from the Green Mountain State.

However, my interest was piqued. In early August I made a trip to Flintstone Road in Windsor, another area of deep native spruce forest, and also turned up flocks of mostly immature White-winged Crossbills. While Windsor is significantly farther from the Vermont and New York state lines, crossbills are propitious wanderers immediately after fledging, and the spruce forests of Windsor are certainly within the wandering reach of post-fledging birds. Anecdotally, there is a specimen of White-winged Crossbill in the bird collection of the Academy of Natural Sciences in Philadelphia with only a latitude and longitude as a locality. The lat/long on the label works out to a location *east* of the Sargasso Sea — in the middle of the Atlantic Ocean! The bird landed on a ship doing oceanographic research in the mid-Atlantic. This type of wandering behavior also explains a small breeding population of White-winged Crossbills in the coniferous forests of the highlands of Hispaniola in the Greater Antilles — far separated from the boreal forests of northern North America and Eurasia. “The resident status of the WWCR in the West Indies, a species typical of northern coniferous forest, supports the argument that the region was more temperate during the Pleistocene. As the West Indies warmed up during the past few thousand years, this species was ‘trapped’ in the last cool refugium on the islands, the high peaks of Hispaniola.” (Raffaele 1998)

Weather and other natural conditions in late 1999 through the summer of 2000 produced a bumper crop of all types of coniferous seeds throughout the Berkshires — as well as to the north in Vermont and New Hampshire. While human observers tend to think of crossbills, and especially White-winged, as “winter finches” that irrupt southward during the cold months in response to poor seed crops in the north, in fact those movements can occur in any month of the year. In addition, White-winged Crossbills breed readily year-round when ample seed crops are found, and they quickly vacate to more seed-laden coniferous forests once favored local crops are consumed. The ample bounty in the spruce forests of the Berkshires during the summer and fall of 2000 was apparently a magnet keeping White-winged Crossbills in the area, and I found this species on every subsequent visit to Flintstone Road, Moran Wildlife Management Area, and the surrounding areas of Windsor and Savoy during 2000.

In fact, the original direction of this particular flight of White-winged Crossbills is open to question. The winter of 1999-2000 had produced a good “winter finch” flight, and both crossbill species had moved through this area to points south during that season. It is not out of the question that the birds arrived in Massachusetts from the south, on their way back north to their usual coniferous breeding grounds of northern New England and across Canada.

New Year’s Day 2001 brought my traditional jaunt to areas of interest to find a good list of birds to start the year, and it seemed only natural to visit Flintstone Road in Windsor to view the White-winged Crossbills there. Harvey Allen, one of the deans

of the Hampshire Bird Club, had mentioned at our December meeting that the male crossbills were teed up singing in Windsor. On January 1 they were indeed perched atop spruces scattered all through the forest, twittering and trilling away, and performing their skylarking courtship display. Females were conspicuously absent, suggesting that they were busy with another activity, perhaps incubating clutches of eggs. It was a marvelous sight and sound to behold. In a conversation with Wayne Petersen, Field Ornithologist for the Massachusetts Audubon Society, shortly thereafter, I commented that "White-winged Crossbills were in the process of bringing off their second or third brood of young in western Massachusetts." "Hold on!" was Wayne's response. Much to my surprise, the species was undocumented as a breeding bird in well-studied and intensively birded Massachusetts. A rare opportunity had presented itself, and the gauntlet had been thrown down: locate either an active nest or barely fledged young somewhere in the deep spruce forests of western Massachusetts.

I made many visits to the central and northern Berkshires over the next six weeks in search of proof of nesting. I saw pairs of White-winged Crossbills engaging in courtship behavior in Ashfield, Dalton, and especially Windsor and Savoy. Singing and displaying males were plentiful in Dalton, Windsor, Savoy, Hawley, and Ashfield. White-winged Crossbill locations were continuously updated on Massbird, the on-line forum for bird sightings in Massachusetts, and many observers were able to take part in the event, and many interesting behaviors were observed and described. For example, a particularly aggressive male crossbill, singing from a treetop near two sets of well-stocked bird feeders, became especially agitated. He flew directly at me while I was standing by my vehicle on the roadside, passed immediately overhead, and then back to his treetop in a demonstration of territorial defense.

But the elusive goal of documenting nesting eluded me until mid-February. I seldom saw females on forays among the singing males. The nests of White-winged Crossbills are difficult to locate, usually hidden deep near the trunk of a dense conifer, high in the cone-laden treetops. And as January and February of 2001 progressed, repeated snowstorms blanketed the region, limiting access to areas where crossbill nests might be found.

I continued my visits to the crossbill-filled area, if for no other reason than to document the length of the invasion. On February 22, 2001, while traveling along the snowbanks of Route 9 in Windsor, a quick visit to Flintstone Road turned up fewer than usual singing males, but still no females or nests. Back on Route 9, near its intersection with North Street, I saw five birds flutter into the tops of a grove of small, bare tamaracks. One bird was bright pink, and the others, barely able to fly, were short-tailed and stripy brown. Persistence had finally paid off: I observed the male White-winged Crossbill feeding four begging, wing-quivering, barely fledged young. After three or four minutes, the family group dropped into a nearby stand of short spruces, lost to sight. Nesting was finally confirmed in Massachusetts! An adult male feeding fledged young is the norm in species like White-winged Crossbill, since females often immediately re-nest if a plentiful cone seed crop remains available.

Over the next three months many observers attempted to document the magnitude of the crossbills' nesting and continued to search for nests. More stands of spruces



DAVID LARSON

were documented as hosting singing male White-winged Crossbills in previously identified towns, but no nests were found. In large part due to the heavy snow cover, vast areas of spruce forest went uncensused, including most of the great sea of coniferous forest south of Route 2 in Adams and Florida. The frequency of singing males decreased in March and early April, and by May few crossbills were to be found in the now-silent forests of Windsor, Savoy, and Ashfield. A quick flurry of sightings came in late May, when Tom Gagnon and Mark Lynch both had adult male White-winged Crossbills feeding fledged young at the lofty top of Mount Greylock in far northwestern Massachusetts. But the incursion and breeding of White-winged Crossbills in Massachusetts was in decline by late spring of 2001, quite probably as a result of the consumption of the great seed crop of the summer of 2000: "Only 1 brood raised when foraging on tamarack, but often several on large spruce cone crops. Only males observed feeding fledglings during the first month after they appear; females presumably nest again (Benkman 1992)."

The fall season of 2001 has reminded us of the excitement of last winter — White-winged Crossbills have graced the pines in Salisbury Beach and along the coast of New Hampshire, Massachusetts, Rhode Island, and Connecticut in October and November. These enigmatic wanderers have again been present in the Berkshires, including a first-ever occurrence of a White-winged Crossbill at one of my feeders (providing a less-than-subtle prompting to write this promised article for *Bird Observer*). Perhaps the birds raised in Massachusetts earlier this year have come back in search of a coniferous seed crop, or more likely White-winged Crossbills raised in

eastern Canada are moving southward due to a drought-induced lack of cones to our north.

Once again, the unique convergence of professional ornithology with amateur birding has added to our documented knowledge of the avifauna of North America and the world. While many ornithologists contribute to the pool of bird sightings, many more amateur birders add to our ornithological database. Many birders make discoveries while enjoying their own experiences with the enigmatic creatures that ignite their personal passion. When those observations are documented and shared with the ornithological community, both ornithology and conservation are the richer. Perhaps no other branch of science regularly benefits as much from the efforts of "Citizen Science" as does ornithology, fuelled by the knowledge and personal experience of the growing cohort of birders. 

Sources

- Benkman, C.W. 1992. White-winged Crossbill. In *The Birds of North America, No. 27* (A. Poole, P. Stettenheim, and F. Gill, Eds.). Philadelphia, PA: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.
- Clement, P., A. Harris, and J. Davis. 1993. *Finches and Sparrows: An Identification Guide*. Princeton, NJ: Princeton University Press.
- Raffaele, H., J. Wiley, O. Garrido, A. Keith, and J. Raffaele. 1998. *A Guide to the Birds of the West Indies*. Princeton, NJ: Princeton University Press.
- Veit, R. R., and W. R. Petersen. 1993. *Birds of Massachusetts*. Lincoln, MA: Massachusetts Audubon Society.

Geoff LeBaron is the Director of the Christmas Bird Count for the National Audubon Society, a position he has held for fourteen years. A birder since childhood and an ornithologist since graduate school, in other lives Geoff was a Loon Ranger for the Audubon Society of New Hampshire; conducted over-water aerial surveys for marine mammals, turtles, and seabirds; was Collection Manager at VIREO (VIsual REsources for Ornithology) at the Academy of Natural Sciences in Philadelphia; and has led natural history tours throughout the world. He thanks Mary Alice Wilson, Harvey Allen, Tom Gagnon, and Mark Lynch for their field observations; Wayne Petersen, Dave Larson, and Kathleen Anderson for their assistance in the field; and all of the above for their insight.



GEORGE C. WEST