White-winged Crossbill Extravaganza

Without doubt, the bird of the season was Loxia leucoptera. An Ohio birder would have been hard-pressed to avoid them. Seemingly any cemetery, anywhere, harbored its fair share of these birds for at least part of the season (as long as cone-producing conifers were present). The irruption was well under way by the start of December, and birds aplenty were found far and wide throughout the season. Reports were received from at least 52 of the 88 counties, totaling 2,377 birds (see map). White-winged Crossbills must have visited every county, and many more were present than were counted. There have been other major irruptions in Ohio, but we lack detailed statistics on past influxes. The largest number tallied on CBCs prior to this season was in the winter of 1963-64, when 115 were recorded.

White-winged Crossbills prefer foraging on conifer species that produce relatively small cones. In Ohio, the favored tree seems to be Eastern Hemlock (Tsuga canadensis), which has small cones with seeds easily accessed by the birds. Prior to European settlement and the resulting widespread planting of conifers, irruptive White-winged Crossbills were probably largely confined to stands of native hemlock in Ohio. Hemlocks typically reach peak abundance in cool, steep-sided gorges underlain by sandstone — hemlock gorges — and such habitat is rare in Ohio. Extensive hemlock communities occur in the following counties:

Ashland (200) Columbiana (110) Hocking (49) Lake (183)

The numbers listed after each of the counties is the number of White-wingeds reported this season. Collectively, these counties account for 23% of all crossbill observations reported this winter, although they represent only 8% of the counties in which crossbills were reported. These data suggest that White-winged Crossbills are still dependent upon extensive native stands of hemlock when they irrupt into Ohio, and irrupting birds congregate in these areas.

The tips of the two parts of the bill, the maxilla (upper) and mandible (lower), bend in opposite directions.

In addition to Eastern Hemlock, Whitewinged Crossbills also feed on White Pine (Pinus strobus) cones. George Sydlowski photographed this male on 16 Feb at Swan Creek Cemetery, Monclova, Lucas.





Benkman (1992) summarizes their feeding behavior: they bite between scales on a cone, causing the cone's scales to separate slightly. If the individual has a left-leaning mandible, they then push the mandible further to the left (and vice versa on right-leaning individuals) to open the scale further, repeating this motion as needed until the seed is exposed and they can remove it with their tongue. This motion may involve twisting the head for additional force.

There is no question that ornamental conifer plantings have become an important food source for this species. A large number of crossbill observations came from cemeteries, in which large conifers often occur. Even in artificial sites, the crossbills typically gravitated towards Eastern Hemlock trees when available.

Literature Cited

Benkman, C. 1992. White-winged Crossbill (Loxia leucoptera), The Birds of North America Online (A. Poole, Ed.). Cornell Lab of Ornithology, Ithaca. Retrieved from Birds of North America Online: http:// bna.birds.cornell.edu.bnaproxy. birds.cornell.edu/bna/species/027

This individual is using its left foot to hold the Eastern Hemlock cone for better access. Published reports seem to conflict on which foot is typically used to hold cones (in relation to the directionality of their bills). Jason Estep photographed this male among a group of 20 to 25 quite tame individuals on 16 Feb in Newark, Licking.





Seeds of Eastern Hemlock (Tsuga canadensis). This is the favored native food of irruptive White-winged Crossbills. Photo by Jim McCormac.



The orientation of the mandible is important for feeding, and it apparently impacts their drinking as well. In Bernard F. Master's photograph from 04 Dec at Green Lawn Cemetery, Franklin, the leftmost and rightmost birds are tilting their heads in order to drink.