Notes

Cedar Waxwings Eating Tussock Moth Females in Early Winter

Bill Crins

On 26 December 2000, while on the Hamilton Christmas Bird Count in my territory southeast of Waterdown, between Mountain Brow Road and the rim of the Niagara Escarpment, I encountered numerous Cedar Waxwings (*Bombycilla cedrorum*). They are present here in good numbers almost every year, feeding on the fruits of Common Buckthorn (*Rhamnus cathartica*). However, one group of about 25 waxwings was found to be gleaning something from the bark of mature Red Oak (*Quercus rubra*) trees in an area of more mature forest adjacent to the thickets of buckthorn.

Initially, I could not see what the birds were gleaning. Since this group of waxwings persistently fed in this way, in spite of the nearby source of berries and the presence of other waxwings, I examined the bark closely, and discovered that there were large numbers of plump, hairy, pale brownish grey, wingless female moths (believed to be White-marked Tussock Moths, *Orgyia leucostigma*) in the fissures of the bark, apparently frozen in place. The waxwings were taking advantage of these frozen moths, hovering in front of, or perching on, the bark or small twigs beside the trunks to pick out the moths. About an hour later, after covering this area by way of a looping route, I returned to the location where the waxwings had been gleaning the moths, and the birds were still present, feeding in the same way. It appeared that this group of

waxwings had capitalized on a food source that the other waxwings and other species in the area had not.

Cedar Waxwings are known to glean and fly-catch for insects during the summer. They have been known to inspect and glean bark for insects, but usually focus on aerial and foliage-borne insects (Tyler 1950, Witmer 1996, Witmer et al. 1997). Males bring insect food to newly hatched young for the first three days of life, but then switch to bringing fruit (Putnam 1949). However, generally, this behaviour of feeding on insects by gleaning or fly-catching is described as "beginning abruptly in May and declining steadily through Sep[tember]" (Witmer et al. 1997). Although fruit constitutes a huge proportion of the food eaten by waxwings (ca. 85 percent; McAtee 1926), a rather large variety of insects has been reported as food, including various Homoptera, Lepidoptera, Hymenoptera, Diptera, Odonata, Neuroptera, and Coleoptera (particularly in the families Scarabaeidae and Chrysomelidae) (McAtee 1926, Witmer 1996, Witmer et al. 1997). They also are reported to glean insects from spider webs (Burtt et al. 1976).

Pittaway (1990) reported on Bohemian Waxwings (*B. garrulus*) feeding on an unusual food source when berries were available, but in that case, the food source was White Elm (*Ulmus americana*) buds, not insects. Regardless of food type (berries or insects), Cedar Waxwings tend to select abundant foods, and this appears to be consistent with the current observation (the tussock moth females, although inconspicuous to the human eye, were found to be common on the bark of the oaks upon close inspection). Also, this appears to be the first report of Cedar Waxwings gleaning insect food during the winter in a cold climate.

Literature Cited

Burtt, E.H., Jr., B.D. Sustare, and J.P. Hailman. 1976. Cedar Waxwing feeding from spider web. Wilson Bulletin 88: 157–158.

McAtee, W.L. 1926. The relation of birds to woodlots in New York state. Roosevelt Wild Life Bulletin 4(1): 7–152.

Pittaway, R. 1990. Bohemian Waxwings eating tree buds. Ontario Birds 8: 75–76.

Putnam, L.S. 1949. The life history of the Cedar Waxwing. Wilson Bulletin 61: 141–182.

Tyler, W.M. 1950. Cedar Waxwing (*Bombycilla cedrorum*). Pp. 79–102 *in* Life Histories of North American Wagtails, Shrikes, Vireos, and Their Allies (A. C. Bent, editor). United States National Museum Bulletin 197, Washington, D.C.

Witmer, M.C. 1996. Annual diet of Cedar Waxwings based on U.S. Biological Survey records (1885–1950) compared to diet of American Robins: Contrasts in dietary patterns and natural history. Auk 113: 414–430.

Witmer, M.C., D.J. Mountjoy, and L. Elliot. 1997. Cedar Waxwing (*Bombycilla cedrorum*). *In* The Birds of North America, No. 309 (A. Poole and F. Gill, editors). The Academy of Natural Sciences, Philadelphia, and American Ornithologists' Union, Washington, D.C.

Bill Crins, 170 Middlefield Road, Peterborough, Ontario K9J 8G1

Feeding Behaviour of Bohemian Waxwings

David H. Elder

Each fall and winter, varying numbers of Bohemian Waxwings (*Bombycilla garrulus*) show up in Atikokan in northwestern Ontario. The birds feed on a variety of wild and ornamental fruits and berries, such as American Mountain Ash (*Sorbus americana*), Showy Mountain Ash (*S. decora*), Highbush Cranberry (*Viburnum trilobum*) and Flowering Crab (*Malus* sp.). The limiting factor of the food is the amount produced each year. Some years there is an abundant crop and in other years, few fruits and berries are available. In addition, migrating American Robins (*Turdus migratorius*), which pass through in late October, usually before the waxwings arrive, can severely deplete the volume of fruit. The Bohemian Waxwings will frequently feed consistently on a certain tree or bush until it is stripped of fruit. Often, they perch as a flock in a nearby tree and fly, a few at a time, to the fruit-bearing tree, eat a few fruits and return to the rest of the flock. There is a constant coming and going and only rarely are all the birds in the flock feeding at once.

Eventually, the food resources are used up and the flocks of waxwings usually disappear, not to be seen until the following winter. Some Bohemian Waxwings do stay and turn to a different food source – the small, round, reddish buds of Red Maple (*Acer rubrum*) and Silver Maple (*A. saccharinum*). There are many of the maples along the streets of Atikokan. The waxwings, a few at a time, feed on the buds by first flying into the maples, perching on the outer twigs and then reaching out to carefully nip off several buds before returning to the flock. The flocks do not seem to return to a particular tree repeatedly, perhaps because the trees and buds are in very good supply.

Discussion

Why do the waxwings eat the maple buds? Perhaps the small reddish buds attract their attention because they resemble the red-coloured fruits and berries they usually eat. Maple buds would seem to be an acceptable food source for Bohemian Waxwings in the absence of other fruits.

Bent (1950) listed the "buds of poplars" (*Populus*) among the foods of these waxwings. Cramp (1988) noted the buds of several tree species in the diet of Bohemian Waxwings in Europe. Pittaway (1990) reported Bohemian Waxwings eating the buds of White

Elm (*Ulmus americana*) in an area that had abundant buckthorn (*Rhamnus*) berries, upon which they fed regularly.

It has been theorized that even when fruits and berries are readily available, Bohemian Waxwings may feed on tree buds "for their protein content as a lack of protein in fruit seems to be the most important limitation of a diet which is high in fruit" (Pittaway 1990).

Literature Cited

Bent, A.C. 1950. Life Histories of North American Wagtails, Shrikes, Vireos, and Their Allies. United States National Museum Bulletin 197, Washington, D.C.

Cramp, S. (editor). 1988. The Birds of the Western Palearctic. Volume 5. Oxford University Press, Oxford, United Kingdom.

Pittaway, R. 1990. Bohemian Waxwings eating tree buds. Ontario Birds 8: 75-76.

David H. Elder, Box 252, Atikokan, Ontario P0T 1C0