

UTILIZATION OF WILD APPLES BY WINTER BIRDS

LEE B. CHAMBERLAINE

The winter of 1993-94 was one of the most severe in the Northeast in recent times, with more cold weather than even the winter of 1992-93 with its blizzard. The impact of extreme temperatures and high snowfall on birds that attempted to winter and on winter visitors was clear. It was very apparent that a food supply that goes unused by birds until the late spring in many years was used heavily and early by many species of birds under these severe condition. This food supply is the fruit of old fashioned wild apple trees (*Malus* sp.) and, in particular, those varieties which retain fruit throughout the winter months. Usually these are wild trees that have small fruits, 1/2 to 1/4 inch or smaller diameter, and are not the ornamental and colorful flowering varieties.

I observed several species eating the pulp or the seeds from the trees and from fallen fruits on the ground. Species which ate the pulp were Red-bellied Woodpecker, American Robin, Bohemian Waxwing, Cedar Waxwing, European Starling, Pine Grosbeak, House Finch and Evening Grosbeak. The species which ate the seeds and at times rejected the pulp, especially as it dries out, were Pine Grosbeak and Evening Grosbeak. Red-bellied Woodpecker and House Finch eat apple fruits in the fall and I have seen them completely consume numbers of whole apples as large as three inches in diameter. Red-bellied Woodpecker forages individually while the House Finch devour apples as a flock. The action by these birds while feeding dislodges the fruits and makes this food supply available to other wildlife species such as cottontail rabbits, Ring-necked Pheasant, White-tailed Deer and various small mammals above and below the snow pack.

In years when the weather is not as severe, this frozen food supply is available to early returning American Robin and Cedar Waxwing. The apples remain frozen and fairly fresh in the cold months, thawing as temperatures moderate. This cold storage food supply is very important to the American Robin. Robins stay on a tree daily until the fruit supply is exhausted. Later they may go to the ground to eat the dried, fallen fruit during early spring snowstorms.

There is much activity at the base of these apple trees as other returning migrants take their turn on the seeds, dried pulp and green sprouts that later emerge from the missed apple seeds. None of these sprouts under the tree will grow for long, because apple trees secrete

chemicals that kill the new seedlings (allelopathy) before the seedlings grow very much. This is a way that many tree species protect themselves from competition by seedlings.

If you are looking for an ideal wildlife food tree or shrub, it would be hard to beat an old fashioned common apple tree. Upkeep is minimal and they are almost impossible to kill when fully established. Cut them back and they sprout profusely the following year. Most die from old age and heart rot if left to themselves untrimmed or maintained. In addition they serve Ruby-throated Hummingbird, House Wren, Eastern Kingbird, Gray Catbird, Cedar Waxwing, Yellow Warbler, Chipping Sparrow, Northern Oriole and House Finch as a food source while in flower or leaf. Cedar Waxwing often eat the flowers. Bark of young trees is a favored food of voles (*Microtus* sp.) and cottontails, so precautions must be made until the bark hardens with age. In deer habitat, fencing is a must for a few years at least. In addition when the apple trees bloom in May they provide a visual beauty and a fragrance akin to perfume.

These trees are not without negatives. The falling apples can create a mess and make late fall lawn mowing a difficult task. Old small dead branches drop off over the winter months and must be picked up every spring. The fallen apples left to rot and ferment in the fall attract large numbers of small yellow jackets, which can inflict a painful sting if provoked as by lawn mowing.

P.O. Box 139 Henderson, New York 13650