

pellets, etc., in and below the tree when first seen. One could go there at any time during the day and find them in that tree, even on the same branches, ready for an interview.

Finally, I would like to report one of the periodical incursions of the Goshawk. They were shot here in numbers during November and December. I received one from Orland, twenty miles south of Chicago, and one from Michigan, and Mr. K. W. Kahmann, the taxidermist, received more than fifty specimens alone. They were from the whole northern part of the state and as far south as Springfield.

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A CAT-PROOF SHELTER.

Those who try to encourage birds to feed and nest around their homes are at once confronted by two serious obstacles, both introduced by man himself, and both greatly interfering with good results; I allude to house-sparrows and cats. While gun, trap, and poison will more or less reduce the numbers of sparrows and tend to drive them from premises where such measures are in use, it is impossible of course to prevent their occupying places where other birds go, and from annoying and fighting with privileged guests. Cats, however, can be absolutely barred from any given area by proper safeguards.

The more I study the habits of cats in relation to bird protection, the more strongly I feel that cat-proof fences should be in much more general use, and I am in hopes my description of the small shelter maintained last summer will induce others of the Wilson Club to try the same experiment. I had the problem of protecting at least a part of our yard from depredations by a neighbor's cat, a cunning and destructive hunter, but immune, by neighborhood reasons, from the extreme penalty it richly deserves. A strong spring-gun, (usually called an air-rifle) is very effective in daylight visits, one hit preventing further calls for some time, but there remained the probability of unopposed prowls at night. Part of our yard was already enclosed by an ordinary four foot wire fence on tubular steel posts. I found cats even when running from a rifle seemed unable, or very reluctant, to climb this fence, invariably escaping through overhanging trees. Following out this idea, I erected a higher wire fence around a group of shrubbery, and experience has proved it a thoroughly cat-proof shelter.

My shelter is circular, about thirty feet in diameter, enclosed by a small-mesh woven wire fence, hung loosely and with some over-

hang, on nine foot tubular steel posts. The fence is at present about five feet high, but the posts are high enough for two or three feet additional if necessary. A strong cat might bound over this fence from outside, but owing to the thick bushes, would have great difficulty getting out, and cats are very cautious of getting into any place which instinct warns them would be difficult of egress. I am positive no cat has ever been inside the enclosure, but a cat-trap is kept set and well-baited during the nesting season as a final precaution. Originally the location of the shelter was a rather unsightly rubbish pile, overgrown by elderberries. After deciding to make it useful, it was renovated, and other shrubs and vines planted. It now contains, besides elderberries, honeysuckles, hazel, wild gooseberries, a small wild cherry tree, hardy climbers such as bitter-sweet and green brier, and the self-planting wild cucumber. All these are native except the honeysuckles, and will thrive without cultivation. From time to time I intend to add other rarer wild shrubs and vines, making it a preserve for plants as well as birds. Almost impenetrable in summer, in early fall it is full of wild fruit relished by nearly all its feathered visitors.

Just outside the fence is a concrete bird bath and fountain formed in three shallow pools, one above the other, the lowest of ample diameter and gently sloping bottom. City water is conducted by a hose, permitting a gentle trickle which adds to the attraction of the pools as well as keeping the contents cool and sweet.

By this combination of water and shelter there has been attracted a very interesting variety of birds, which we have had a splendid chance to study almost without leaving the house, a strong binocular bringing any object within close range. Many kinds of birds were seen right at home that we probably could not have found in the open country.

The following list of visitors may be somewhat disappointing to those expecting great results the first season, but I am sure it would have been much increased if closer observations were made in the migration period, and especially early in the morning:

NAME.	DATE.
Least (or Acadian) flycatcher	March 29th.
Juncoes	March 31st.
An unidentified native sparrow	April 8th.
Another species of native sparrow	Same day. Fine and unusual song.
Migrant warbler, yellow sides	April 28th.
Other native sparrows	Same day.
Maryland Yellow-throat	May 10th.

Wren bathing in trickle from second basin. The first observed in the water	May 11th.
Chipping sparrow	Same day. This little sparrow and his mate were frequent visitors afterward and nested somewhere near.
Wood thrush	Same day.
Two olive-backed thrushes	May 14th. These migrant thrushes stayed a week or more, and while not in song, became quite familiar.
Ruby-throated hummingbird	May 16th.
Least flycatcher	Same day. Very interesting and unafraid. Stayed a number of days, and used a particular low branch from which it hawked for insects.
Yellow warbler	Same day.
Oven-bird	Same day. This peculiar "high-steeping" little bird also stayed several days, but remained shy and difficult to observe.
Male gold-finch	May 17th.
Strange tiny bird, impossible to identify. Apparently feeding on dandelion seeds, but leaping into the air in a peculiar way at intervals.	May 19th.
Two wood thrushes	June 12th.
Yellow warbler	July 26th.

The wood thrushes made the shelter their home for some time, and we were in hopes would nest there. They became familiar, and did not hesitate to sing when we were quite near. Their lovely voices, heard so closely that every murmur and cadence would be enjoyed fully, was ample reward for whatever trouble and expense the shelter cost.

The above list includes only unusual visitors. Robins, rose-breasts, orioles, thrashers, and other common though delightful residents, are of course present every year without regard to special protection. Neither does it include migrants seen in the trees, although they may have been attracted by the shelter. Worthy of mention, however, is the confidence of one or more female rose-breasts, which resorted to the shelter before the nesting season. These demure sparrowy matrons searched for stray sunflower seeds among the bushes almost within reach of hand, and well illustrated the security most birds seemed to feel in the protection of the thicket. It was not at all uncommon to notice small birds dart into the shelter in the fading twilight, and probably there were many lodgers who escaped notice in daytime.

I am well aware suggestions for a cat-proof fence usually call for a much higher and more elaborate affair than mine, and probably additional protection would be necessary for a shelter distant from dwellings, where it would be left to itself. Nevertheless, my fence is a practical success and not only a safe shelter for the birds, but a source of pleasure and instruction to our family, as well. It has brought the bird-life of woods and fields to our daily view, and many hours have happily passed in watching for new incidents and new visitors.

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