## THE POOL AN ATTRACTION FOR BIRDS WITH ONE ILLUSTRATION By FRANK N. BASSETT

UCH has been written on how to attract birds about the home, but while a great deal of emphasis has been placed on the feeding table and the bird bath, we seldom see mentioned the use of an artificial pool.

It seems pretty well established that the abundance of birds in a given locality varies in proportion to the abundance of food, all other things being equal. The same rule might apply to the bird bath, and if so, the number of birds should vary in direct proportion to the size of the bath. With this in mind we built, in April, 1924, a pool with a surface area of forty square feet in our back yard, where a bath of two square feet area had been, with the hope that twenty times as many birds would visit it. Some attractions were added by way of aquatic plants, gold-fish, frogs, etc., and by making one end shallow enough for birds to use for bathing. The results far surpassed any hopes that we had entertained.

By the first week in May the plants had become well established and the water cleared, and on May 7 a family of young Western Robins bathed in the pool, as did also some young Alameda Song Sparrows. From this time onward the new visitors increased in quick succession and by June 1 the following birds had appeared: Coast Bush-tit, Yellow Warbler, Brewer Blackbird, California Brown Towhee, Western Chipping Sparrow, Oregon Junco, Russet-backed Thrush, Allen Hummingbird, Golden Pileolated Warbler, and Anna Hummingbird. The Brown Towhee appeared one morning at five o'clock and aroused the neighborhood by his repeated calls, resounding in the still morning air like the tones of a minute steel anvil. He was discovered dancing up and down the curb of the pool, trying frantically to gather courage to jump in. Later the courage came and when it did it was superabundant. He would wet himself and actually squat in the water in utter abandon of all other interests for minutes at a time, allowing one to approach to within three feet of him. He appeared late in April and remained all summer and most of the winter, until Mrs. Bassett trapped and banded him. Such an indignity could not be endured and about a week later he disappeared and has not returned since.

Most of the birds came and bathed almost daily throughout the summer, but a few, the Yellow Warbler, Chipping Sparrow, Oregon Junco, and Russet-backed Thrush, were seen only once. The Pileolated Warbler remained about a week and then disappeared. The robins had nested in a park across the street, gathering mud for the nest at the pool. Later two pairs were discovered. Both remained throughout the summer and each raised two broods. This year only one pair returned, to our knowledge, but they raised four broods! The last brood left the nest August 23. This is the first time since we took up our residence here in 1914 that robins have nested or remained through the summer.

By September 1 four more visitors had arrived, in the following order: San Francisco Spotted Towhee, Cassin Vireo, Bullock Oriole, and California Jay. Two Cassin Vireos came on June 7 and both birds bathed by flying to the pool and dipping while on the wing, sometimes dropping perpendicularly to the water and at other times skimming the surface swallow-like. On June 18 a female and two young Bullock Orioles appeared at the pool. The young bathed and continued to do so almost daily for more than a month. The parent birds had nested in the park near

the robins, the nest being less than one hundred yards from the pool. This is the first appearance of Bullock Orioles in this vicinity since our residence here. They nested here again this year.

During early September (1924) Lutescent Warblers came, and this year they appeared in August. One was seen bathing by alighting on the water-lily pads, its weight forcing the leaf partly under water when it bathed in what was thought to be overconfident security. The only other bird seen to do this was a young song sparrow. But its weight being greater than that of the warbler, it sank the leaves deeper and the bird was compelled to hop from leaf to leaf in rather quick succession.

The arrival of the Western Flycatcher on September 16 marked the close of the summer season. It flew about the yard catching insects and drank from the pool, but bathed in the spray of the garden sprinkler by perching on the branches within

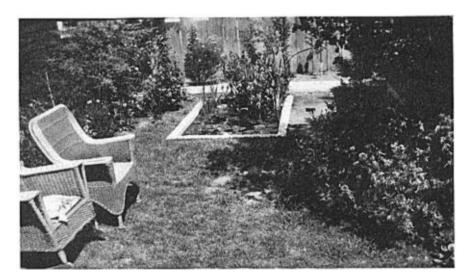


Fig. 26. The pool in August, 1924.

the radius of the spray. This year it appeared the last week in August and was seen to bathe in the pool many times. Each time it darted from its perch to the water and, striking the surface with considerable force, bounded back to the perch. In comparison with the delicate and careful dipping of the Cassin Vireo the reckless plunges of this flycatcher reminded us of a small tern diving for fish. Once it struck the water and fluttering and splattering violently it actually "swam" for a distance of about a foot before rising.

Winter was officially opened on November 18 by the appearance of a Ruby-crowned Kinglet and an Audubon Warbler. The kinglet bathed in the pool by clinging sideways to the tule stems and fluttering the wings, first with one side towards the water and then the other. He had endeavored several times to bathe and each time was driven away by the warbler until he finally succeeded in evading his persecutor. A Dwarf Hermit Thrush came late in November, when the weather was exceptionally cold and the pool froze nearly every night for three or four weeks. On the morning after the first freeze the thrush was seen pecking at the ice, and a few minutes after I had broken it open he came back and straightway plunged into the chilly water and remained for two or three minutes, vigorously throwing the water

in all directions. Another thrush used to bathe very late in the evening, when it was so dark he could hardly be seen at a distance of thirty feet. Both birds remained through the winter. Then followed the Golden-crowned and Nuttall sparrows. Oregon Juncos had also appeared and about thirty of them were banded. A flock of Cedar Waxwings came and remained three days, stripping a large Pyracantha of its berries. They frequently drank from the pool but were not seen to bathe. Towards spring the Intermediate Sparrows closed the procession and from then till the present time a similar sequence to that of last year has occurred.

To one acquainted with the birds of this region there is nothing startling in the mention of the birds noted above. But of the twenty-four subspecies (twenty-three species) that appeared during the first year of the existence of the pool, twelve of them had never before been induced to come to the yard. No doubt they had been in the vicinity each year; but the pool was the magnet which drew them into the yard and gave us no end of entertainment and opportunity to study their behavior.

In the case of the robins nesting here it can hardly be claimed that the pool was entirely responsible, for the same season robins nested in several other parts of the city where they had never been seen before. The probable cause of this lies in the recent introduction of certain ornamental shrubs, of the berries of which they are very The shrubs are Cotoneaster (several species) and Pyracantha angustifolia. The latter in particular is in very general use and the fruit is a bright-colored berry, ripening in the fall and remaining on the bush through the winter. Other species of Pyracantha are also used. The presence of so many of these shrubs attracts the robins here in winter in larger numbers than ever before, and their migrating instinct being comparatively weak, some of them find the place to their liking and remain to nest. The same may be said of the Dwarf Hermit Thrush and the Cedar Waxwing, for these also have been with us in increasing numbers the last two winters. All three of these birds are always seen feeding on the Pyracantha or the winter fruiting species of Cotoneaster. Unlike the robin, however, the latter two species are highly migratory and with the coming of spring they are stricken with this impulse and go they must, no matter what the inducements offered to keep them here.

Some of the foregoing observations were made by my wife, Lavina M. Bassett, as my own duties commanded my absence part of the time. She also banded most of the birds caught.

A word about the construction of the pool may not be amiss. On account of the small yard we were compelled to build the pool with vertical walls, a sort of a concrete tank sunk in the ground. A rectangular hole was dug about two and one-half feet deep and six inches of concrete spread in the bottom. A form was then built for the six inch walls, using the earth for the outside form, after which a plaster of cement and sand was spread on the walls and bottom. Then followed a coating of pure cement applied with a paint brush. Soil was then put in about a foot deep at one end, and sloping up to the curb at the other. A brick wall was placed across the middle to keep the sloping soil from sliding. The water was turned in, the plants put in place and time accomplished the rest. A far better and cheaper type is the saucer shaped pool, but considerable space is needed for it. By scooping a hole the desired shape, taking care that the slope from the center to the edge is very gradual, one can place the concrete without a retaining form; and by placing rocks around the edge and elsewhere a very "natural" effect can be attained with rushes and sedges and an irregular "shore line". This is the most desirable pool but it occupies considerable space. If water-lilies are desired in the center there should be about a foot of soil and a foot of water at that point. Care must be taken that the concrete is of the proper consistency and the walls of sufficient thickness to insure against cracking. An inlet and outlet are not needed. The plants will oxygenate the water and the goldfish will devour all insect life including mosquitos. Aquatic snails and mussels will partly reduce the growth of algae, although some of this must be removed by hand in summer. On warm days evaporation will amount to as much as two inches or more. The garden hose may be used to refill and, if thought necessary, to overflow the pool for a short time. If the hose will reach from the pool to the cellar, by using a tub the water can be siphoned off once a year and the dead vegetation cleaned out. A disk or ball made of hardened plaster of paris dropped into the pool will help reduce the acidity of the water caused by decaying vegetation.

The pool, offering attractions to so many birds and insects and supporting so great a variety of aquatic plants and animals, is a decided success. It is a constant source of interesting happenings and pleasant surprises.

Alameda, California, November 6, 1925.