BIRDS AND EUCALYPTUS TREES
By John McB. Robertson

Forty-five years ago the area surrounding my home at Buena Park, California, was a treeless plain. The first settlers planted trees as windbreaks, to protect their crops and orchards from the desert winds, as shade trees about their homes, and in groves for use as fuel. The tree most commonly used was the Blue Gum (Eucalyptus globulus). This tree, brought here from Australia, has become so much a part of the southern California lowland landscape that it seems like a native. J. Smeaton Chase, in his "California Coast Trails", pays a glowing tribute to this tree, from which I will quote: "The landscapes of California have been greatly enriched by the acclimatization here of the eucalyptus. It is not often that the presence of an imported ingredient adds a really natural element to the charm of scenery; but the eucalyptus, especially the globulus variety that has become so common throughout the State, has so truly native an appearance that it seems as if its introduction from Australia must have been more in the nature of a home-coming than of an adoption."

It is of interest to see in what measure our birds have adopted this alien tree and put it to their own uses. The planting of trees of any kind in a naturally treeless country is sure to have a marked effect on the bird life of that country. When such planting is a part of the agricultural settlement, in which the cultivation and irrigation of a variety of crops is involved, it is not possible to judge the extent of influence on bird life of the trees alone, as they constitute only one of a number of factors.

I have noticed for a number of years that the trees about my home are decidedly useful to many birds, and I will try to sum up my observations briefly.

The blue gum planted in close grove formation grows straight and tall; the lower branches are shaded out and the trees are all very much alike, except around the edges where they expand somewhat to meet the light. On the other hand, trees spaced far apart, spread out, and each tree becomes an individual, unlike any of its fellows. It is with this type of tree that most of my observations deal.

The influence of trees on bird life may be divided into three main factors: shelter, nesting sites, and food. Shelter is the first and most universal factor, it may be shelter from the wind, from the heat of the sun or from enemies; it may...
be temporary, or it may consist of regular nocturnal or diurnal roosting places that afford a certain security to the bird. Probably all of the local bird species, except the strictly terrestrial ones, make some use of the eucalyptus trees for shelter. Valley Quail (*Lophortyx californica vallicola*) and Gambel Sparrows (*Zonotrichia leucophrys gambeli*) have been observed going to roost in them and doubtless many other birds use them in this way, while the diurnal sleepers, the Barn Owl (*Aluco pratincola*) and the Screech Owl (*Otus asio quercinus*), occupy the trees during the day. When a grove is near a body of water it sometimes shelters Black-crowned Night Herons (*Nycticorax nycticorax*) during the day. This factor of shelter is not an exclusive attribute of the eucalyptus, however, and might be supplied as well or better by some other tree.

The next factor to be considered is that of nesting sites. The loose bark of the blue gum seems to have been designed especially for Linnets (*Carpodacus mexicanus frontalis*) to nest in. They build behind slabs of bark on the trunks or larger limbs, or in accumulations of bark in the crotches. The bark sometimes betrays their confidence, for a rain with strong winds in the late spring often destroys their nests. Another bird that used a bark filled crotch for a nesting site was the Screech Owl whose history I have recorded (*Condor*, XXVII, 1925, pp. 35-36). The Bullock Oriole (*Icterus bullocki*) builds in the pendent clumps of dense foliage on the tips of small branches, high above the ground; in one instance, an Arizona Hooded Oriole (*Icterus cucullatus nelsoni*) built in a blue gum instead of the usual palm, remaining true to local custom, however, by using palm fiber almost exclusively in the nest.

Mourning Doves (*Zenaidura macroura marginella*) select the larger horizontal limbs near the ground for their frail platforms; Brown Towhees (*Pipolo fuscus crissalis*) sometimes build in thick growth or accumulations of bark if not too far above the ground. Green-backed Goldfinches (*Spinus psaltria hesperophilus*), Lawrence Goldfinches (*Spinus lawrencei*), and Lark Sparrows (*Chondestes grammacus striatus*) build at moderate elevations in the thick foliage; Western Kingbirds (*Tyrannus verticalis*) and Cassin Kingbirds (*Tyrannus vociferans*) select open crotches near the tree tops, where they may have a wide view of the surrounding country and from which they defy the world to meddle with their affairs. Other birds that have nested in eucalyptus trees near my home are: Brewer Blackbird (*Euphagus cyanocephalus*), California Shrike (*Lanius ludovicianus gambeli*), Anna Hummingbird (*Calypte anna*), Black-chinned Hummingbird (*Archilochus alexandri*), English Sparrow (*Passer domesticus*), and Dwarf Cowbird (*Molothrus ater obscurus*), the last in a second-hand manner by laying eggs in nests of the Linnet.

The blue gum blossoms throughout the winter months, different trees showing great variation in time so that some flowers may be found from November until April. The blossoms attract bees and many other kinds of insects and are attractive to some birds, either for the insects or the nectar, I do not know which. Birds observed feeding about the flowers are: Audubon Warbler (*Dendroica auduboni*), Cedar Waxwing (*Bombycilla cedrorum*), Anna Hummingbird, Allen Hummingbird (*Selasphorus alleni*), and Rufous Hummingbird (*Selasphorus rufus*). The Cedar Waxwing is an irregular spring visitor and, if present at all, is apt to be found about the eucalyptus flowers. The Allen and Rufous hummingbirds announce their arrival in early spring by their peculiar staccato buzz about those trees that are in flower at the time.

But it is the seed eaters that reap the greatest harvest from this tree. The small black seeds are produced in great abundance; they ripen in fall and winter and sift to the ground leaving the empty pod on the tree, or pods and all fall to
the ground. The winter visitors get most of this food; the following birds have been seen to eat these seeds: Gambel Sparrow, Puget Sound Sparrow (*Zonotrichia leucophrys pugetensis*), Golden-crowned Sparrow (*Zonotrichia coronata*), Willow Goldfinch (*Spinus tristis salicamans*), Green-backed Goldfinch, Lawrence Goldfinch, Pine Siskin (*Spinus pinus*), Brown Towhee, Lark Sparrow, Lincoln Sparrow (*Melospiza lincolnii*), and Sierra Junco (*Junco oreganus thurberi*). The Lincoln Sparrow is not common here, but some winters a single bird will be found feeding in the same spot under the trees day after day. Pine Siskins have been seen here only between March 16 and April 10, 1925, when a small flock fed daily, getting the seeds from the pods on the trees or on the ground. It is interesting to see a Willow Goldfinch loosen the seeds from the pods by pecking at it and sometimes picking it up and flipping it to one side with a quick jerk of the head, then following it up to get the scattered seeds.

Then the trees are put to other uses. Dead trees soon lose their foliage and bark, but stand, stark and bare, for many years. These furnish favorite perches for Sparrow Hawks (*Falco sparverius*) and Pigeon Hawks (*Falco columbarius*) in winter, and for Wood Pewees (*Myiochanes richardsoni*) and Olive-sided Flycatchers (*Nuttallornis borealis*) as they migrate in spring and fall. These trees are not very hospitable to woodpeckers, because of the hardness of the wood, but on one occasion a small flock of California Woodpeckers (*Balanospyra formicivora bairdi*) spent about a month harvesting walnuts from a neglected orchard near by and storing them in the longitudinal cracks in a number of dead trees near my home; they did not stay to make any use of these nuts, but left, as soon as the supply of nuts ran out, and never returned. This is at least ten miles from the closest part of the normal range of this bird. Red-shafted Flickers (*Colaptes cafer collaris*) sometimes work on dead trees when the sapwood is infested with borers, and they sometimes dig out termites around the bases of eucalyptus fence posts. Red-tailed Hawks (*Buteo borealis calurus*) regularly use certain trees, usually live ones, as vantage points from which to watch for pocket gophers or other prey.

I have mentioned thirty-eight species of birds that have been seen to make some use of the eucalyptus trees near my home; and doubtless, in other areas, where other birds are present, the list could be extended indefinitely, showing that our native birds are on the alert for the advantages offered by any exotic tree introduced by man.

*Buena Park, California, April 1, 1930.*