from Mr. Dawson's evidence, from the record by Alexander Walker in THE CONDOR (vol. 16, 1914, p. 94) which first gave Dawson his clue, from the statements in Grinnell and Storer's "Animal Life in the Yosemite" (pp. 373-374), and from additional corroborative facts that I have found in the collection of the Museum of Vertebrate Zoology, that *Empidonax griseus* is an upper Sonoran and Transition Zone species, confined in the breeding season mainly to sagebrush surroundings in the Great Basin. *Empidonax wrighti* nests mainly in the Canadian Zone, occasionally in the Hudsonian Zone, from southern California north at least to extreme northern British Columbia. Any apparent overlapping of breeding ranges (as is claimed to occur in the White Mountains) is doubtless to be explained either by the upward extension locally of lower zones, thus carrying *griseus* to an altitude where *wrighti* usually breeds, or else as an unwarranted assumption of nesting from the mere occurrence of birds (juvenal or adult) outside their normal nesting ground.—H. S. SWARTH, *Museum of Vertebrate Zoology, University of California, Berkeley, April 21, 1924.*

Early Nesting of the Junco on the Berkeley Campus.—On March 16, 1923, the writer watched a female Junco (*Junco oreganus*, subsp.?) carrying nesting material. It was thus possible to find the nest, which proved to be located just west of the University Library. In this case the site was on the ground and the nest was well concealed by a dense mat of ivy. Building operations were completed and the first egg laid on March 23. At 6 o'clock on the evening of March 26 the nest contained four eggs which the female had begun to incubate.

At 9 A. M. on April 9 the nest contained two eggs and two young which had hatched since the previous evening. Only two out of the four eggs hatched. The fledglings left the nest on April 16 when only seven days old. They were not at that time able to fly, but scrambled about readily beneath the tangled ivy and eluded my grasp easily. Here, as is often the case with the Nuttall Sparrow on the Campus, the early departure of the young from the nest was seemingly hastened by the presence, in the nest, of numerous Argentine ants.—JOSEPH DIXON, *Museum of Vertebrate Zoology, Berkeley, California, June 15, 1924.*

WITH THE BIRD BANDERS

Under the Direction of J. Eugene Law, Altadena, California

White-throated Sparrow Banded on the Stanford Campus.—During the Christmas vacation two funnel traps were set in the plots of low thorny shrubs in front of the University Library. The catch consisted principally of Golden-crowned Sparrows, with a few "White-crowns," a Song Sparrow, and on December 26 a White-throated Sparrow (*Zonotrichia albicollis*) which received band no. 124066. This was the first living specimen of White-throat that many of us here had seen. The golden splash on the superciliary stripes from the bill to above the eyes, and the white throat sharply contrasted with the gray breast, quickly identified the bird by key; but for better proof it was compared with four skins in the collection from the Eastern States. My first comment upon the bird was "a great little fighter" in contrast to the golden and white crowned species. During the remaining days of the vacation, and later in February when the traps were reset at that locality for two weeks, it failed to repeat.—ERNEST H. QUAYLE, *Stanford University, California, April 27, 1924.*

A Third White-throated Sparrow Banded.—In the work of bird banding, at 8 A. M., April 10, 1924, I captured in Lincoln Heights, Los Angeles, California, a White-throated Sparrow (*Zonotrichia albicollis*). It was released bearing band no. 93452.—ELBERT BENJAMINE, *Los Angeles, California, April 10, 1924.*

The return of these birds this autumn will be looked for with unusual interest in view of the rarity of the species in California, and of Mrs. Allen's experience with the first one banded in the state (see CONDOR, vol. 25, p. 141). No effort should be spared to recapture these three birds.

A Correction.—By an inexcusable inadvertence the name of Miss Jessica A. Potter was omitted from the list of charter members of the Los Angeles Bird Banding Chapter. Miss Potter was one of the first to enlist and is an enthusiastic worker at all times. Her recapture at 1118 Santee Street, Los Angeles, on January 26, 1924, of House Finch no. 84437, which was banded by Mrs. Ella H. Ellis at 910 Grattan Street, Los Angeles, on October 31, 1923, is notable since these stations are more than a mile apart and on opposite sides of the main business section of the city. Both stations are in back yard gardens of closely settled districts.

Gambel Sparrow.—Harry S. Swarth, of the Museum of Vertebrate Zoology at Berkeley, California, engaged in field work this summer in company with Allan Brooks, at Atlin, near the northwest corner of British Columbia, included in his outfit a tiny collapsible trap and an assortment of bands. In a letter dated at Atlin, July 19, 1924, he writes: "I looked at the trap mistrustfully a long time, but finally mustered up courage to install it in our yard (we have a cottage in Atlin). In about 15 minutes there were two birds in it, a Junco and a White-crowned Sparrow, and I was scared stiff—worse than the birds! However, I managed to band them, and since then I have banded about a dozen more White-crowns (*Z. l. gambeli*). Look for them in Altadena next fall!"

Now for a broad front of traps to pick up Swarth's banded Gambel Sparrows! It is our first opportunity to retake in their winter home migrants which were banded at their nesting home in the Far North. With this species traversing in winter nearly the whole length of the Pacific slope, and with nearly a hundred banding permittees now in California alone, recaptures may well occur. Gambel Sparrows should be looked for in southern California from September 15 on; earlier, no doubt, farther north.

Then there is another problem that banders can help solve. If all banders will see to it that their traps are working every morning from mid-September until the Gambel Sparrows arrive, so that the first arrivals will be recorded, a tabulation can be made of the progress of these birds as they come south. Let everyone cooperate in this effort to measure the speed of travel of the vanguard. Retakes will give us clues to their routes. And as any station will constantly pick up new birds, activities should not relax throughout the season, lest Swarth's birds escape detection. A like "drive" should be made for a record of the migration of the Golden-crowned Sparrow.

Western Trap.—In THE CONDOR for September, 1923, a bird cage trap was described, which used a drop door and a trip doorstep. To this we have given the name "Western Trap." Adapted to a 6-compartment trap, each compartment with its own door, the drop door scheme has been very successful. This "6-cylinder" trap with 3 compartments on each side, each compartment 5 inches wide, 8 inches high and 8 inches long, is best when made of ¾-inch mesh "chicken screen." Thus built it seems to catch any bird which can be baited to its vicinity, and when a bird gets in, it stays until it is taken out. Many birds learn to escape from the so-called funnel traps, and a bird working in the funnel often keeps out the whole flock.

Potter Trap.—This is another adaptation of the drop door scheme, with the ends, sides, and top so hinged by simple "hog rings" (such as farmers put in hogs' noses) that the trap can be folded flat, and thus a number of them can be easily and inconspicuously carried about. Miss Jessica A. Potter, who worked out this plan, carries two of the traps in a neat shopping bag when she goes a-banding. The trap has two compartments and is made of ½-inch mesh "hardware cloth." It is appropriately called the "Potter Trap."

Arrangements have now been made in Los Angeles for the manufacture of both the Potter Trap and the 6-compartment Western Trap, and they will be distributed to those who want them at actual cost.

Vest Pocket Trap.—In passing, it may be of interest to describe the "Vest Pocket Trap" that I made for Swarth. Of ½-inch mesh hardware cloth, it folds to a parcel ½ x 6½ x 9 inches. The ends are 6 x 6½, sides and top each 6½ x 9. Round ½-inch paper-clips hinge the top to each side and end. Two oblong paper-clips, at each side of each end piece, project through the apposing end of each side piece, and lock the corners when wire rods are slipped into the projecting ends of the clips, a rod for each corner. The entrance, which is cut out of one end, eliminates all but 3 vertical strands

at either side, and 1 at the bottom, thus cutting out 7 vertical and 7 horizontal strands. The door consists of 3 pieces of the hardware cloth, each 3 strands wide by 11 long, clipped close (as are all other pieces) so that no projecting ends are left. These 3 pieces are hinged and hung by the round clips inside the door opening. The trip doorstep is the same as that described in THE CONDOR for September, 1923, except that one reverses it so that the "goose-neck" is farthest in the trap, and the "nose" or "crook" of the goose-neck bends over the step instead of away from it. The door is rolled up on itself inside the trap and supported by the crook of the goose-neck with the doorstep tilted and resting on the edge nearest and just inside the door. With the materials at hand, ½-inch hardware cloth 24 x 18 inches (dealer will cut it into the pieces for you), paper-clips (anybody's office), and 30 inches of baling wire, anyone can fabricate this trap in a few minutes.

Depauperizing.—It has been asserted that a "food table" makes dependents of the birds. Reconstructed, this means that food plenty incapacitates birds for hunting food when it becomes scarce, a conclusion which is hard to believe. Obviously bird life drifts toward a food table and tarries there, just as it does to any other center where food is abundant; but the mere fact that man and not "Nature" supplies it, can impose no unfavorable limitations on bird physiology. It is a bird's business to go where food is plenty, and a person need not look far to find birds gorging themselves on Nature's abundance.

By broadcasting "chick feed" daily in a yard well filled with brushy cover, I have attracted an unbelievably large bird population, portions of which seem settled and other portions nomadic; for right in the midst of plenty, seasonal instincts hold fast, and whole populations move out.

In nesting time, for instance, I have counted 24 red Linnets at one time on the wires about the place. Now, in early August, there is not one here, though juvenals are common enough, with a few, at least, females. Green-tailed Towhees tarried this year for 25 days, apparently in direct response to abundant food, and were in full song before the last one left. Twelve were banded. Lincoln Sparrows, hitherto undetected at this Sonoran mesa station, were seen almost daily from March 1 to April 18, eating the seed we scattered; there were at least 3 of them, two of which carried away bands nos. 52291 and 80072. A Song Sparrow called on October 16, 1923, for band no. 52117, and returned February 18, 1924, to register, tarrying 3 days. Golden-crowned and Gambel Sparrows literally swarmed all winter, but abundance of food could not hold them after early May. Food supply had to yield to primitive instincts in every case.

All of which goes to show that we banders need have little fear of disrupting Nature's plans if we feed liberally, and that our chances of detecting passing migrants are materially increased by so doing. Moreover, in any definite study by trapping and banding (plumages, molts, populations, migrations), quantity of material is important, and an abundance of birds adds pleasure and zest to the work. By all means scatter food. A daily ration of chick feed and dry bread (ground up in a meat grinder) will entertain a multitude.

Breeding Colonies.—On May 22, 1924, Wright M. Pierce and I undertook to band the nestlings in a large colony of Tricolored Red-wings, at a small tule-filled lake 4 miles north of Laguna Beach, California. In 9 hours' time, working together, we banded 554, ranging in age from 3 days old to those ready to leave the nest. Many others were too young to band.

Our bands were strung serially on long wire "safety pins" made to hold about 75 bands each. The pin that was in use was snapped through a buttonhole. Another more circular safety pin held the pocket lens in a convenient place. Work was done in hip boots. Pierce picked up a bird while I opened a band and handed it to him. He pinched the band on with his thumb and finger and I finished with the pliers if needed. Between nests I recorded in a notebook, with frequent checks of the number on the band.

On June 10, 1924, we banded 22 young, all we could find, in a small colony of Yellow-headed Blackbirds at Big Bear Lake in the San Bernardino Mountains, California.—J. EUGENE LAW, *Altadena, California, August 10, 1924.*