

Anthus spraguei. SPRAGUE'S PIPIT.—A specimen was collected April 4, 1905, at Fort Lowell and is now in the Thayer collection. It was identified at the Biological Survey.

Regulus satrapa olivaceus. WESTERN GOLDEN-CROWNED KINGLET.—A specimen was taken by C. Birdseye, September 14, 1908, in the White Mountains and is now in the collection of the Biological Survey.

Hylocichla guttata sequoiensis. SIERRA HERMIT THRUSH.—A specimen was taken by Dr. A. K. Fisher May 14, 1892, at Fort Huachuca and is now in the collection of the Biological Survey.

The Swarth list enumerates 362 species for Arizona. The above records add 9 species, or a total of 371 species now known from the state.—WELLS W. COOKE, *Biological Survey, Washington, D. C.*

Birds transporting Food Supplies.—Mr. Chas. T. Ramsden's interesting note¹ on "The Bobolink as a conveyer of mollusca" suggests to me the desirability of drawing attention to two other instances of similar phenomena. Professor G. E. Beyer of Tulane University, who has been a close student of Louisiana birds for many years, has collected numerous Upland Plover (*Bartramia longicauda*) soon after their arrival upon the Gulf Coast, which bore beneath their wings from 20 to 40 small snails of the Genus *Physa*. In reply to a query about this point Professor Beyer, in a letter of August 7, 1911, says: "The peculiar habit which this bird has in concealing the snails among the under wing feathers has been known to me for many years. When first discovered I pointed out this singular fact to several of my hunter friends. The occurrence, however, was so regular and was confirmed so often in after years, that I expected the habit to be generally known. I used to count the number of snails regularly; at one time I found as many as forty-one, oftener between twenty and thirty, never less than ten or twelve. The stomachs of the birds always contain a number of crushed shells of the snails. Furthermore, the finding of these snails is only possible if the birds are obtained shortly after their arrival from the south, the earliest date of which I always placed about March 22. I was at the time unable to determine whether the species of snail was the same or different from ours, for the genus contains several species. At the time the 'Papabottes' arrive here, *Physa* is not common with us and does not become plentiful until May and June. I am sorry to say that I became as it were side-tracked in after years as I had intended to continue this inquiry and extend it to other migratory birds of a similar nature."

The notes by Professor Beyer and Mr. Ramsden give us the final phase of the phenomenon but they do not show how the snails reached the position in which they were found. The following brief note published by Grace Ellicott of New Castle, Ind., in 'The Guide to Nature'² gives an account of the initial stage of a similar occurrence. Miss Ellicott's contribution is as

¹ Auk, XXXI, 1914, p. 250.

² Vol. I, No. 5, Aug. 1908, p. 168.

follows: "The occupants of a recently disturbed ant hill were excitedly crawling about the hill and the adjacent cement walk. They were large, and to a Blue Jay in a neighboring tree they must have looked luscious, for flying down, the jay began to pick them up with an eagerness that seemed to say that this was an opportunity that might come his way but once. As rapidly as he could do it he seized the ants, with each capture lifting a wing, sometimes one, sometimes the other, and seemed to deposit his prey among the feathers back of and underneath it. So quickly he worked and with such evident eagerness to make the most of this rare occasion that, as he lifted the wing, putting his bill among the feathers, it often seemed that he must lose his balance and topple over backwards. But he kept his poise, worked on with all speed and had laid in quite a store when a passerby frightened him from his task. Whether this jay had only just discovered the most convenient of all storehouses for his use or whether this food was to be carried to the nest for the young, for it was nesting time, he was most interesting."

This Blue Jay was therefore taking advantage of the instinct of ants when disturbed to fasten their jaws onto any object that presents itself. It must be also that the snails here mentioned have a propensity for clinging to the feathers among which they are placed. These three most interesting observations suggest that numerous birds may have the same or other wonderful habits about which we are ignorant. They should stimulate minute and careful research and comfort those who fear that all the interesting things have already been discovered.— W. L. MCATEE, *Biological Survey, Washington, D. C.*