Mr. Morcom's greatest contribution toward ornithology lies in his aid and encouragement to others in the accomplishment of what they might not otherwise have done. In the case of my own efforts in this field, whatever the results achieved the opportunity came from him. Let this writing be my testimony thereto.

California Academy of Sciences, San Francisco, September 1, 1933.

AN ABNORMAL LITTLE FLYCATCHER

WITH TWO ILLUSTRATIONS

By WALTER W. BENNETT

Counting on the fingers of one hand, it only takes a few digits to number strange albino birds seen during his whole lifetime by almost any one ornithologist. So few are their numbers and so little understood are they that ornithological literature on the subject is far from replete. Hence, this study.

The uncommon attracts attention. One of the strange birds of the season of 1932 in Yosemite National Park, California, was a Little Flycatcher (*Empidonax traillii brewsteri*) that was not like others of her kind. If she had been rightly created, her colors would have been dull—harmonious with the willows she occupied not far from the foot of Yosemite Falls. She would have been rather olive above and whitish below, with light eye ring and wing bars. But she differed—because the crown, an area in front of the eye to the bill, and the auriculars were largely white. The nape and rest of the plumage were like others of the species. The eye was normal.

The cause of this white is not easily to be determined. It might have been partial albinism that was hereditary, transmitted by a parent that had this trait. Or it might have been caused by some disease that turned the particular feathers white just as the hair of a man may sometimes change prematurely. The white did, however, indicate that the color pigment usually present in feathers was lacking in part of the head plumage. The difference this white made in the life of the bird was, perhaps, worth noting.

She was discovered and shown to the writer June 30, 1932, together with her nest which contained four eggs. The bird's mate was apparently perfectly normal as to plumage; she was on the nest at the time. The nest was about five feet high in the vertical crotch of a small willow tree on an island bounded on one side by the swiftly flowing Merced River and on the other by overflow some three feet deep from high waters of the same stream. The nest was apparently the usual structure in size, shape and composition. There was another Little Flycatcher nest some hundred yards downstream, used by birds of normal colors which gave a good comparison in this study.

The first thing noted in approaching the nest was how conspicuously the white head gleamed in the sunlight. Normally the color of flycatchers is so dark as to constitute splendid protective coloration. It must have made her presence on the nest very evident to enemies and how she had escaped hawks and owls was a miracle, as both hunters were present.

The next peculiar circumstance was her extreme nervousness and great activity after leaving the nest. The bird could not sit still longer than a few seconds, but was continually darting here and there in seeming excitement. Day after day the



Fig. 3. The white head of this abnormal female Little Flycatcher showed conspicuously in the sunlight.



Fig. 4. The abnormal Little Flycatcher: the young one was more nearly like the normal male parent than like the white-headed female.

same was true, so it was not just temporary. Perhaps it was due to what might correspond to self consciousness in man. She might have been sensible of her whiteness.

But more likely it was due to other factors. In darting after insects the bird would miss the prey very often. It was quite noticeable that she lost her prey more often than other normal birds in the same neighborhood. And why not? A fly-catcher, of course, sits on a dead twig or other unobstructed observation post, and when it sees an insect, darts after the victim. Many insects have a very limited field of vision. They probably can not clearly see a normal, dull colored bird until within a few inches. But certainly a brilliant white head in sunlight could be discerned much farther, especially if moving, and the creature would have a greater chance of taking alarm and escaping. And since hunting was more difficult, she had to increase her activity much more in order to catch the same number of insects as other, normal Little Flycatchers. Maybe that was why she had developed her "nervous temperament."

The story of the nest developed another interesting fact. On June 30 it had four partly incubated eggs, white, each with a few small brownish spots in a wreath about the larger end. On July 5 the female was watched for half an hour feeding young in the nest. On July 7 she was shading the young. When she left, it was found that there were one young about three days old and two infertile eggs in which the yolk was watery and turned as the egg would be turned. The fourth one had disappeared for some reason. One of the two infertile eggs was broken in handling, the contents drained out, and when the shell was replaced in the nest the female promptly carried it off about 100 feet where it was dropped.

The fact that one out of four eggs produced a healthy youngster was encouraging; but the fact that two eggs were infertile perhaps showed that there was a hereditary weakness of some sort as other observers frequently report to be the case with albino parents. Would this young one show white on its plumage and be thus abnormal like its mother, or would it be perfectly normal like the father? It was closely watched for this. It was found July 17 in its nest during the forenoon, but a few hours later the bird left and was located on some twigs only three inches above the ground. After feeding him the female carried away some excreta that had dropped on the ground. She would entice him to hop along the ground by getting near him, uttering a tender trill and fluttering her wings slightly. But the point of this all is that the feathers of this young at this stage were all dark where they should be dark, none white or even lighter colored than normal. Further plumages may have been different, but this one, at least, was more nearly like the normal male; the albinistic trait of the female parent did not carry through in this case.

The male parent did not act as usual. He was watched on July 5 and did not come near the nest at all. At no time during the whole observation was he seen to come and feed the young, bring any food to the female while she was on the nest, nor did he bring it to her while she was off. He would, however, escort the female back to the nest occasionally. He took no part in incubating. He would alight on low branches mostly two to five feet high and seemed content to watch from a distance. The most noteworthy fact was that the male would continually fly at, and pick at, the abnormal female, seemingly to destroy! Yet she must have had atttraction for him, else why did he remain in the vicinity? Or was it merely the territory that held his interest?

But in spite of the white, whether hereditary or not; regardless of a possible hereditary weakness that left half her eggs infertile; even though enemies could see her better than other Little Flycatchers and though it was more difficult to catch insect food; not counting the seeming cruelty of her mate, she did heroically raise in the nest one seemingly normal young. Those were trying family obstacles for one small bird to have overcome!

Oakland, California, September 26, 1933.

REMARKS ON THE PROPOSED RACES OF SQUATAROLA SQUATAROLA (LINN.) AND COMMENTS ON THE NOMENCLATURE

By JAMES L. PETERS

When Gregory Mathews in the first part of the third volume of his Birds of Australia (1913, pp. 69-72) applied Charadrius hypomelus Pallas (Reise versch. Prov. Russ. Reichs, 3, 1776, p. 699) to the form of the Black-breasted Plover wintering in Australia and supposed to breed in the northern part of eastern Siberia, he opened up a controversy that is not yet settled, and probably will not be for some years yet. His action in recognizing an east Asiatic race of Squatarola squatarola induced Thayer and Bangs the next year to name the North American bird Squatarola squatarola cynosurae (Proc. New England Zool. Club, 5, 1914, p. 23). Since that time some ornithologists have taken the view that there are three races of S. squatarola: the typical one breeding on the tundras of northern Russia and Siberia east to the Taimyr Peninsula; another supposedly larger form breeding from east of the Taimyr Peninsula to western Alaska to which Pallas' hypomelus has been applied; and the third, believed to be the smallest of the three, breeding in Arctic America from Point Barrow to Southampton Island, cynosurae Thayer and Bangs. Another group of ornithologists refuses to recognize any of the proposed separations, while a third and smaller group is willing to accept an east Siberian-west Alaskan form, but considers the North American the same as the European-west Siberian race.

The stumbling blocks to the whole situation lie in the fact that there is considerable individual variation in size in the Black-breasted Plover anywhere in its range, and in that it has never been possible to bring together an adequate series of breeding birds.

Mathews claims that in winter plumage the eastern form is grayer above, not as brown as the European bird; but his series were not seasonably comparable. Thayer and Bangs thought that a European specimen was darker than east Siberian examples. Stuart-Baker believes that the eastern race is "distinctly more gray," thereby agreeing with Mathews in this respect; but Baker is the only ornithologist to regard the eastern race as smaller than the European.

I have examined a small series of breeding adults of the three proposed races, all in comparable plumage, and can find no color characters at all. On the other hand a large series of birds in winter plumage would indicate that the color of the upper parts is variable, birds taken in the early fall being decidedly grayer above than specimens collected during the winter, whose dorsal coloration is distinctly browner.

Some years ago I tabulated a series of wing measurements of Black-breasted Plover; these measurements were later published by Friedmann (Bull. U. S. Nat.