Bird Note

A white Red-necked Stint, *Calidris ruficollis* in Dry Creek Saltfields on 22 March 2016 and a very pied Australian Pied Oystercatcher, *Haematopus longirostris* at Kingston, SE on 6 August 2018

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INTRODUCTION

Birds sometimes show unusual amounts of white plumage varying from almost completely white to small white patches. In the this note I report the sighting of an almost white stint seen at Dry Creek Saltfields followed by the sighting of an Australian Pied Oystercatcher showing abnormal white patches, at Kingston, SE. I then review the causes of such white plumage and offer some suggestions on identification of the stint.

THE RECORDS

A White Stint

While looking at shorebirds in Dry Creek Saltfields on 22 March 2016, I noticed what appeared to be a completely white bird in flight with a flock of Red-necked Stints, *Calidris ruficollis*. Closer inspection revealed that the bird was indeed almost completely white but had several patches of grey feathers on the upper parts with a few grey streaks on the head and neck. The legs were yellow and the bill mostly yellow with a black tip. Figure 1 provides a profile of the bird.

A very pied Australian Pied Oystercatcher

While travelling with Stuart Hull and Neil Cheshire along the foreshore at Kingston, SE we noticed an Australian Pied Oystercatcher showing excessive amount of white on the upperparts. Otherwise the plumage, bill and leg colour appeared to be normal. The bird is illustrated in Figure 2.

Figure 1. White stint at Dry Creek Saltfields, 22 March 2016. Image Colin Rogers

Figure 2. A very pied Australian Pied Oystercatcher at Kingston, SE 6 August 2018. Image Neil Cheshire

DISCUSSION

The unusual appearance of white feathers on a bird may be due to Albinism, Leucism, Dilution or Progressive Greying (Forsythe, 2016).

Albinism is caused by a genetic mutation that results in the complete lack of the enzyme tyrosinase in pigment cells and it is the absence of this enzyme that prevents the production of melanin. It is melanin that gives the colour to a bird's feathers so without melanin the bird's feathers appear white and the eyes pink. In other words, if the bird is wholly white with pink eyes we are looking at a case of Albinism.

Leucism, by comparison, is a reduction rather than a complete lack of pigment so birds may vary from almost completely white to only partially white. For example, they may have white patches somewhere on the plumage.

Dilution is a situation where melanin is present but is not produced in the quantity necessary to give the bird its normal appearance. The bird appears paler than normal or to have been sprayed with a fine mist of white paint (Forsythe, 2016).

Progressive Greying is a condition usually found in older birds and is caused by the loss of pigmentation with age that results in the appearance of white feathers. For practical purposes this condition may be better described as Progressive Whitening. Progressive Whitening is caused by the loss of pigment cells with age and with each successive moult the bird acquires more white feathers. The bird's appearance therefore changes over time while in the usual case of Leucism the appearance is relative similar over time.

For a more comprehensive discussion of pigmentation disorders see Vaughan (2008).

Diagnosis of the white stint and very pied Australian Pied Oystercatcher

The partial although extensive distribution of white feathers and lack of pigmentation on the stint in Figure 1 and the normal eye colour rules against Albinism. The bird is also not suffering from Dilution as described by Forsythe (2016), i.e., there is no hint of a uniform white mist covering the plumage. Large areas of the plumage are completely white with only a few small areas of typical non-breeding grey feathering. That suggests it is a case of partial, albeit extensive, Leucism.

Distinguishing between Leucism and Progressive Whitening is not possible without some knowledge of the history of the birds, i.e., information about the state of the plumage in previous moult cycles. As such information is lacking in both cases it is not possible to say whether they illustrate cases of Leucism or

Figure 3. A Leucistic Australian Pied Oystercatcher showing asymmetrical distribution of abnormal white feathers on the upperparts. Image Neil Cheshire

Figure 4. A Leustic stint showing adult grey wing coverts. Image Colin Rogers

Progressive Whitening. However, as Australian Pied Oystercatchers are relatively sedentary, future observations may be possible and that would establish which case is involved.

Identification of the stint

Identification of the stint to species is complicated by the fact that most of the usual plumage features are lacking. Nevertheless, there is sufficient information provided by the structure and shape of the bird to rule out the two possible confusion species; Long-toed Stint, *Calidris subminuta* and Little Stint, *Calidris minuta*.

Judging by the size of the grey wing coverts visible in Figure 4 the bird is an adult and although the yellow legs invite confusion with Long-toed Stint the bill shape and size are inconsistent with that species; as is the large head relative to the body. Little Stint is also ruled out by bill size and shape, largish head relative to the body and the absences of obviously longer legs typical of that species.

On that basis it seems safe to conclude that the white stint in Dry Creek Saltfields on 22 March 2016 is a Red-necked Stint exhibiting extensive Leucism.

CONCLUSION

This note documents two cases of Leucism in Red-necked Stint and Australian Pied Oystercatcher. As the Australian Pied Oystercatcher is likely to be relatively sedentary, future observations may establish whether the Leucism progresses with age.

REFERENCES

Forsythe, A. 2016. *Albinism vs. Leucism vs. Dilution vs. Progressive Greying*, https://www.midwestbirdwatching.com/blog/albinism-vs-leucism-vs-dilution-vs-progressive-greying

Vaughan, G. 2008. Why is that white bird white? *Miranda Naturalists' Trust News* 71: 5-7.

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