THE DISPLAY OF THE PIED WAGTAIL.

BY HENRY BOASE.

THE courtship of the Pied Wagtail (Motacilla a. yarrellii) is rather more elaborate than seems usual among the smaller There is also a grace about its performance which makes it outstanding, an absence of bizarre effects of attitude or behaviour which are almost startling in the case of some The Pied Wagtail is remarkable in that it is also a bird of marked contrast in colour, has a very definite seasonal variation in plumage and is the possessor of a specialized character in the long tail. The somewhat complicated ritual in which it makes its court is probably bound up with these matters, and the general similarity of the plumage of the male and female suggests the possibility of similar behaviour of the two sexes in the courtship. This has not been found to be the case; rather it would appear that for the most part the female Pied Wagtail preserves that air of complete detachment common to most species of bird as the male makes his court, and only in one instance was the female Pied Wagtail seen to join in the performance by providing a ritual of her own.

It would appear that the call is used indirectly in the courtship as a means of attracting a mate to the male in possession of territory instead, as is more general, with Passerine birds, of making use of the song for this purpose. The use of the call in this way is clearly marked when the Pied Wagtail arrives in its nesting places from the south in spring, the ringing "chisk" or "chissik" betraying the presence of recently arrived males along the dry stone dykes and railway cuttings, etc., where so many find a nesting-place. The song seems to be reserved as an expression of well-being and is not used as a means of advertisement for the male.

In its earlier stages the courtship of the Pied Wagtail is a matter of pursuit. From stone to stone, clod to clod, over dykes and boulders, along the railway cuttings and by the sea-shore, Pied Wagtails in twos and threes dance here, there and everywhere as the males endeavour to get the female to pause long enough to inspect their charms. In the first instance the display of the glossy black throat-patch seems the matter of importance, and, when opportunity offers, with head held high and bill pointing upwards at a steep angle, the males face the female. She on the other hand seems little impressed, and after a short run after a wandering fly, takes wing for a yard or two, closely pursued by the anxious males. Time after time the males approach the female to show her

the glory of their plumage, but the female takes little heed, and with provoking restlessness leads them a dance.

What appears to be the next step in the proceedings was seen on another occasion. The female, when she saw that the male meant business, ran to a small semicircular hollow and stood facing him. He approached rather diffidently, jerking the head downwards and forwards, and returning to the normal attitude, the return being accompanied by a quick flutter of the wings. This he did repeatedly as he approached, not in a direct line, but in a zig-zag course, facing to the right and then to the left as he manœuvred towards the female.

In another instance the general circumstances were the same and the male approached the female in the same zig-zag course, but with the head depressed slightly below the general level of the back with the neck at normal extension and the bill lying almost level, and one wing and the tail expanded and pressed down so that they swept the ground. Only the wing nearest the female was spread, and the tail was twisted over to show as much as possible of its upper surface. The head was also inclined in the direction of the female. At each change of direction in the zig-zag course the attitude was changed to meet the new conditions.

On a further occasion the display became a joint affair. The writer gives the particulars as they were noted at the time, in spite of the appearance of an error in judging the sexes. The bird taken to be the male was facing the other when first seen and was bowing rapidly. In the raised position the neck was extended to its limit and the bill was held normally; in the lower position, the neck was retracted, the head being level with the back and the bill slightly uptilted. The other bird, judged to be the female, so far as the plumage gave indication, crept or shuffled with wings and tail moderately expanded and held depressed around the male, which turned about so as to face her.

Still another form of approach of the male was seen where the male drew near the female with wings drooping and tail spread and depressed, the head held low, level with the back, and the feathers of the rump raised, an attitude rather favoured by the Blackbird in like circumstances.

The various forms of the display agree on the whole. The male clearly endeavours to make the most of its charms in advancing towards the female. It is somewhat surprising that, so far as the writer can determine, the display of the throat-patch should be so important only in the preliminary part of the display when the female is first attracted. On occasions, probably when the female gives the time, the male

may pause in a crouching attitude with the head thrown back, the neck being extended and the bill pointing upward, for quite an appreciable time, there being something ecstatic in this finish to a series of short chases in pursuit of the female. no doubt quite an exciting business for the male. Nor is the account of this preliminary stage of the courtship complete without reference to the marked ability in erratic flight possessed by the Pied Wagtail. This is, of course, a feature noticeable at all seasons, yet in these chases in spring the fascinating aerial dancing of this bird, when it appears as a tassel of black and white ribbons in wild gyration as the couples and trios chase and spar, is in itself rather remarkable. Later on, when the young have been reared and are already strong on the wing, the same device is used to feed the youngsters in the air as served to pass a few seconds in exciting argument with a rival.

These various forms of display become, as it were, summed up in a final effort prior, it would seem, to pairing. The action has not been seen as part of the courtship display proper but appears to be a special effort on the part of the male after having secured a mate. On the occasions when it has been seen, the pair has been feeding without any marked appearance of excitement; suddenly the male has changed its attitude and become transformed into a miniature Peacock. With head held high and bill inclined upwards, wings drooping or slightly spread and the tail spread and erected vertically, the male Pied Wagtail becomes a striking little figure. rehabilitated he makes for his mate, which may or may not meet his advances. So far as has been seen, the female has no definite display or attitude in meeting the male. The male may vary his performance in detail. In one case he fluttered his half-expanded wings when approaching the female instead of allowing them to droop; in another instance he varied the performance by springing a few inches into the air fluttering the wings. The female has been generally inattentive, finding interest in a passing fly or in preening, and the whole business may end n a wild pursuit.

In point of date most of the display seen has been during the comparatively narrow period extending from the last week of March until the third week of April, the period during which, in the eastern Tay area, the Pied Wagtail comes in from the south. The pairing display is of course given at later dates, but in general the finding of a mate appears to occupy the attention of the birds immediately on arrival in the neighbourhood of their nesting places. Incidentally, display has been seen for the most part on ground where the bird does not nest.