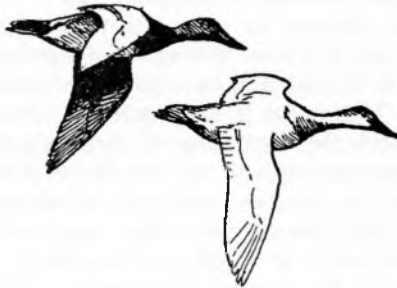


This excellent book is completed by a full bibliography of more than 500 references, and by a good index. Thus to the end it continues to give us a really factual presentation of the subject. The wonder is that this has been done in such a very readable way. Some people who hurry through life may declare with irritation that the book could have been condensed. And without a doubt it could, but at what a loss. We would have had another dry authoritative text, thumbed by a few scholars, instead of a work that will not only be useful to the minority but will stimulate a wide range of readers to discover more about these fascinating problems for themselves. The descriptive passages are never purple, but clean-spoken and evocative. As but one example of the excellence of Hochbaum's style I will end with a quotation from a passage describing the bathing of ducks. 'Sometimes a mad excitement overtakes the crowd. One bird races across the surface as if the devil himself were on its tail. Then in full stride it dives. The instant it comes up it goes down again; up it comes, down it goes. All the birds in the flock may be consumed in this devil-chase, helter-skelter, this way and that, over the water and down under. After a few minutes the divings end. The flock regains composure and settles quietly to the job of preening.' The rhythm and pace of the words fit their meaning so well that the scene comes to life before us. And yet this is a book written by a scientist! Would that such excellence could become commonplace.

G. V. T. M.



A FLYING VISIT TO DELTA WATERFOWL RESEARCH STATION

By G. V. T. Matthews

IN April 1955 I attended an informal conference on bird orientation held at Duke University, North Carolina, the necessary funds being provided by that university and the U.S. Office of Naval Research. As I was shortly to join the staff of the Wildfowl Trust it seemed a good thing, while in North America, to visit Delta Waterfowl Research Station in Manitoba. The Institute of Wildlife Management, Washington, most generously produced the additional funds needed to allow this deviation from track.

For one reason and another time was short and it was very much a flying visit. My impressions were mainly of people and places, so those who are interested only in birds need read no further. My Fisher Index (new species seen) was quite absurdly low.

To arrive at Idlewild airfield is a most disappointing introduction to New York—17 miles distant and giving no indication of its famed panorama. The entry road passes an alternation of cemeteries and used car dumps. Both must

undoubtedly be the largest in the world, square mile upon square mile of monumental masonry and acres and acres of vast bicoloured beetles advertised at ridiculously low prices. Car parks form a characteristic and not unattractive pattern on the American landscape when viewed from the air.

I had only a morning to 'do' New York, so my impressions are fragmentary. There is a marked contrast between fine buildings and a surrounding squalor. The United Nations Building is most impressive and not like a match-box. While endeavouring to cross the road to the waterfront I *think* I saw a real cops-and-robbers car chase; at the very least one vast limousine backfired repeatedly at the same time as another hurtled along behind it. At Philadelphia I was nearly shanghaied by a huge individual who insisted on calling me 'sailor.' I was so flabbergasted by this that I could only say 'Sir, I am an Englishman.' Such banality served its purpose as I suffered no further molestation.

Washington, a fine city, reminded me strongly of New Delhi, even down to the flattened rotundas. Darkly brooding on the fate of our Indian capital, I was cheered by the thought that no Red Indian government would take over here. The traffic flowed with remarkable smoothness until one beetle hit another a mighty blow from behind. The foremost beetle opened its bonnet-jaw in protest, glass tinkled and a police car with a small lighthouse on its roof came wailing over to investigate. The Office of Records in its endeavours to defend the cleanliness of its porticos, was living up to its name. The cries of a distressed starling were being relayed to its not-very-impressed cogenders. Two highlights of my visit were conversations with C. R. (Pink) Gutermuth, secretary of the Wildlife Management Institute and a leading conservationist, and with F. C. Lincoln, whose books and papers on bird migration had nurtured me from the cradle.

Flying on to Richmond and thence to Raleigh-Durham, the 'plane blossomed with bird orientation experts once one of them had approached me as an obvious Englishman—because I was wearing a pullover. Professor D. R. Griffin and Dr T. H. Goldsmith from Harvard, Professor H. L. Yeagley from Pennsylvania and Professor H. B. Hitchcock from Middleburg were only too anxious to start conferring at once. At the airport, which had a real hitching-rail, I was quickly made aware that I was in the South. Searching for the 'rest rooms' I was confronted by *four* doors labelled Gentlemen, Men, Ladies and Women. And so to bed in the luxurious Washington Duke (*sic*) Hotel.

The tempo slowed to the academic for three days, conferrings from 9 a.m. through to midnight. Others present besides the 'plane load were Dr J. G. Pratt of Duke, Dr G. Kramer of Wilhelmshaven, Dr W. H. Thorpe and Dr D. H. Wilkinson of Cambridge, Mrs K. S. Rawson of Harvard, Professor L. Graue of California, Major Otto Meyer, U.S.A.A.F., and Mr Carson from Honolulu. At intervals we ranged through the Carolinas and Virginia, making experimental releases of pigeons. (I had been doing just this only a few days previously, on the other side of the Atlantic.) A valuable synthesis of ideas was achieved and many misinterpretations cleared up. Lavish hospitality was showered on us. The Duke campus is rightly regarded as a very fine one—it is modelled on our own older universities, with differences. I never really got used to the 'Coca-cola' machine which stood in the entrance, nor the way in which habitués could drain a bottle in one gulp, without repercussions. An invitation to lunch with the Vice-President conjured up, to my Cambridge-bred eyes, visions of High-table and all its elegance. It was just a little disappointing

to be shepherded through the usual self-help cafeteria and introduced later to the man a few trays ahead. But no English don could have been more courteous and punctilious in attending to his guests.

On 19 April I set out for Delta. This involved a rather devious route on one of those 'planes which plod steadily along between major towns, seldom more than an hour's flying time apart. From Raleigh-Durham we proceeded via Greenville, Chattanooga, Nashville, Louisville and Indianapolis to Chicago. By diligently stretching my legs at every stop, I could boast of having set foot in 13 of the States, and flown over four more in the five days I was there. (In Canada I 'did' four (plus two) of the Provinces.) At Chicago, having insufficient time for a night's sleep, I had arranged to meet Dr W. J. Beecher, the taxonomist, at the airport. He kindly offered to show me a 'dive' in nearby Cicero, a district more stained with the blood of gangsters than any other. After promenading past a series of night-clubs with luxurious advertisements, he decided that I would not be interested in 'that sort of thing' and we finished in a very dull bar draped by a few mildly villainous characters. As in all public places the television screen was never empty, and the inmates gazed continuously and listlessly at the appalling drivel that flickered before them. American television has not even the redeeming feature of a 'Look' programme. It does have a weather forecast feature, however, and the bar-tender, obviously classifying us as 'egg-heads,' came to inquire 'What's diss precipitation?'

On via Minneapolis and Fargo to Winnipeg, where Al Hochbaum, Director of the Delta station, was waiting to meet me. At Slimbridge we would think twice before going to Southampton to meet a visitor. It is a measure of the spaciousness of the Canadian outlook that from Delta an equivalent trip (140 miles) is genuinely considered to be a minimum courtesy, tied in with a shopping expedition and a meal in town. We drove through a dead flat plain, duller and more treeless than our Fens. Small wonder that Al, who was raised in Colorado, finds mountains haunting his dreams. Eventually we reached Portage La Prairie, the nearest town to Delta, which is some 20 miles away to the north. Two miles short of Delta the road was impassable and baggage had to be carried half a mile to a station waggon left in readiness. Actually I was lucky to have such an easy entry; during the next three months the access roads were under water.

Delta village is a cluster of wooden houses, with some 20 families. The great Lake Manitoba stretches away 300 miles to the north. East and west as far as eye can see spread the reed-beds, creeks and 'bays' of the Delta Marsh. South, more marsh gives place to the farmland plain. Were it not for the wildfowl and the people who gather there to study them one might be forgiven for thinking it a place for Eeyores, 'rather gloomy and sad.'

The research station is centred around the Kirchoffer Lodge, formerly the shooting lodge of Mr J. F. Bell, who founded the research station in 1931. At the beginning of the century King George V, then Duke of York, stayed here, a royal connection of which they are justly proud at Delta. The lodge has been converted into a comfortable hostel for visiting research workers. The permanent staff of the station and their families live in wooden bungalows clustered round the lodge. Work rooms, laboratory, library, dark room, and the like, are housed in long low buildings previously used for rearing mink.

For the past 16 years the guiding light of the research station has been Al Hochbaum. To attempt a verbal picture of his attributes and character would launch me on an eulogy which I know would be distasteful to this essentially

modest man. It was well worth journeying thousands of miles just to have the privilege of meeting him. Scientist and administrator, wildfowler and artist, no one could better fill the rôle. His skill with brush and pen can best be appreciated by studying his two books, *Canvasback on a Prairie Marsh* and the recently published *Travels and Traditions of Waterfowl*.

Al's delightful wife, Joan, is the sister of Pete Ward, who followed his father as the superintendent of the Delta Hatchery. This carries on the original function of the station—production of quantities of young wild duck for release on those marshes which had been depopulated by over-shooting. Many hundreds of eggs are collected each year from the surrounding marsh, the robbed hens re-nesting and rearing the second clutch themselves. The collected eggs are hatched in great incubators and the young reared *indoors*. When nearly ready to fly they are then sent to the marsh which is to be their home. At the time of my visit some 200 ducks of several species were living in one of the big hatchery buildings. These were late bred birds from the previous year kept in over the winter. Such methods are in complete contrast to waterfowl avicultural practice over here, but appear to be successful. Certainly parasites, predators and disease are much more easily controlled under such artificial conditions. Pete also is no mean artist. He was working on an ethereal composition of swans flying through clouds which is one of the few wildfowl paintings that have stirred my unresponsive soul.

A study collection of living wildfowl is maintained, purposely limited to those species which normally occur at Delta or pass through on migration. The flood-waters, which were already causing inconvenience while I was there, continued to rise in the following months and eventually broke down the fence round the collection. All the Whistling Swans, many breeding ducks and some geese escaped. However, none of the eight Trumpeter Swans left and hopes are high that they will breed particularly as some are hand-reared birds. Of these the most outstanding character is 'Daisy' from whom no woman is safe even when wearing trousers.

The floods eventually came to the doorsteps of all the station cottages, entering one of them, and surrounded the Hatchery and Lodge. They also interfered with the working of the decoy by raising the level of the pond so that the ducks could see over the screens. This decoy, built on traditional lines, was suggested and designed by Peter Scott, coming into operation in 1951 (see Fifth Annual Report). Nan Mulder, the decoyman, has generations of decoymen in his blood and his elder brother still operates the family decoy in Holland. I was regaled with many ancient photographs of olden days when decoying flourished. Nan emigrated to Canada as an agricultural worker and must be counted among the luckiest of men to find himself near the site of the only decoy to be built in the history of North America.

Frank McKinney had been at Delta nearly a year when I arrived, and had obviously settled into the place and into the hearts of the Canadians. His work as Assistant Director covered the supervision of the graduate student programme, management of the station library and finances, and the continuation of his fine work on behaviour which he started at Slimbridge. Everyone has been shocked and saddened by the recent tragic death of his wife Brenda.

Al, Frank, Pete and Nan form the permanent staff nucleus at Delta. During the long winter months the Lake and Marsh are frozen, November to February, the wildfowl have migrated south, and there is little field-work at the station. Last winter nearly nine feet of snow blanketed the area. But with the melting

of the snow and ice the birds return and so do a number of biologists who come to study them. The majority are from American or Canadian universities, carrying out postgraduate research on problems of wildfowl biology that have interested them. The other category is 'Federal men,' professional biologists in the employ of the government conservation organisations. Thus, the international team which covers the breeding areas of the duck by air and ground surveys meets here at the beginning of May each year. Thereafter they determine as best they can the success of the breeding season, and on their reports the very tight restrictions on shooting are adjusted for the autumn.

Many of the workers had not yet reached Delta when I was there, but I was fortunate to meet a number. Graham Cooch was on his way through to continue his studies of Snow Geese in the far North (see p. 58). With him was his newly acquired wife, fresh from the City and about to spend months living with Eskimos! But if Eskimos are susceptible to charm she will have been all right. Alex Dzubin came in from his research area in the 'pothole' country 100 miles west of Delta. There he has been working on long-term breeding studies, and on such problems as the home range of ducks. Jim Teer had just arrived to continue his investigation on the behaviour of nest-predators, particularly crows and skunks. He also had an attractive wife with him. Martin Moynihan, as yet unpaired, was looking remarkably English with a briar pipe, so his long spell at Oxford, studying behaviour under Tinbergen, has had some effect. He was looking into the breeding behaviour of Franklin's Gull to complete a comparative monograph on the Gulls. Another bachelor was Helen Hays (not the actress), up from Cornell to study the breeding behaviour of the Ruddy Duck. I couldn't help feeling that she could have done this with much greater ease at Slimbridge. To impose on the credulous ducks Helen had brought a model male Ruddy equipped with a moveable head. The bill could be made to beat on the breast in a realistic fashion by means of a small electric motor mounted inside the body and operated from the bank. Other workers whom I was not fortunate to meet in person include Bob Smith, investigating the breeding behaviour of the Pintail; Lloyd Keith, studying the ecology of wildfowl on artificial impoundments; S. T. Dillon, working on the ecology of large marshes; Mike Milonski aiming to understand the degree of nesting success on agricultural land and carrying out orientation experiments, and Robert Klopman, following the flock behaviour of Canada Geese. The latter is coming to England to continue his work this year.

Although the ice on the lake had broken up before I arrived, the floes had piled up along the shore in a great barrier 20 feet high and stretching as far as the eye could see. I really felt I had received an introduction to the frozen North, and yet Delta and Slimbridge are almost precisely on the same latitude. The water in the marshes was ice-free and Al took me on a fascinating canoe trip through the reed beds and the scatter of excited ducks just back from the south. I particularly fell for the wholly delightful little Buffleheads, and quite realised why there is always agitation at Slimbridge to get specimens into the Collection. Although they are not uncommon, they, like the Hooded Mergansers, for one reason and another, have for years eluded us.

Most of the time was spent in discussion with the various personnel of the station, finding out how and why things were done. I have found the background of knowledge I gained in that way of great value when considering the expanding research programme at Slimbridge. The second evening I was required to give out information, instead of sucking it in, at a seminar in the

Hall of the Lodge. These informal gatherings are a regular feature of station life and are found to be both popular and useful. One of the workers, or a visitor, delivers a short discourse on the progress of his own work and the rest of the people then discuss and criticise it at some length. I found it a very stimulating procedure. By such meetings, too, the outlying research workers are kept in touch with the general work and do not regress into hermits.

For my third, and last night a 'social evening' was laid on in best Canadian style. I had a suspicion that the Englishman was to be de-reserved, especially when told that dancing would be Square and Virginia Reels. My protests that I had no experience of either were little heeded, except that I was offered copious draughts of the national drink, rum and 'Coco-cola.' I can certainly vouch for this as being an excellent convention-relaxer and it has no after-effects. It was a wonderful party.

When the time for departure came I realised how much this place and these people had come to mean to me in so short a time. I wished I could have stayed longer, but the pressure of events was driving me back. Al presented me with a memento of Canada, the skin of a wolf he had shot himself. I was deeply touched, even though some unkind colleagues have suggested it was a suitable choice of animal. In Winnipeg we dined with Angus Gavin and his wife. Angus carried out many interesting ornithological explorations while with the Hudson Bay Company, one of his achievements being to locate the breeding grounds of Ross's Snow Goose. When the Hochbaums had started back along the long trail to Delta, the Gavins very kindly took me on a tour of the city, which is rapidly spreading. Three times the Gavins have built a house farther out in the country as their previous one was swallowed up by the town blocks. The houses are mostly of wood, very fresh and modern; often they are dwarfed by the enormous cars standing outside them. There is a fine park with a small-scale Whipsnade-type zoo, and large conservatories. The wonderful blooms they contain are a great source of pride and enjoyment in a country where spring comes late. Finally, at the airport hotel the proprietor greeted me, to my delighted surprise, with 'Hi, Geoff.' I had been introduced but briefly on my arrival three days before. Such is the friendliness of this fine nation.

Take-off next morning was complicated by the beginning of Summer Time: the 'plane, having started from Vancouver the previous day, was running on the old time. In the country areas, indeed, no notice is taken of time manipulation. We flew straight to Toronto, right over the Great Lakes, a truly wonderful sight. Then on to Montreal, where there was the best part of a day's wait, and friends of a friend took a stranger into the family in typical Canadian fashion. I was astounded to find how much they knew of the intimate details of British politics and ashamed to find how little I knew of theirs. Already one felt closer to home for this is a very European city in appearance and manners.

And so off into the night on the long flight over Newfoundland and on without stopping to Prestwick. Cloud, which spread beneath us as we approached Scotland, broke most timely over the Kyles of Bute to bring a surge of delight at homecoming. The custom's officer looked a little unbelieving when I declared a wolf skin to be in my meagre luggage, but kindly let it pass.

Once more we boarded a 'plane for a swift flight down the length of England to London Airport; then back to earth for the last time in ten days, and back to the sordid reality of British Railways (Eastern Region).