
DEESIDE NATURALISTS

SOCIETY

Report on the CEGB Nature
Reserve at Connahs Quay

1983 & 1984



Classified list of birds

The classified list of birds is based on field work over the two years by members of the Deeside Naturalists' Society, and by visitors to their reserve at Connahs Quay. Logbooks are kept in each of the three hides, and during the year information is extracted from the logs and recorded on species sheets. There is, therefore, a fact sheet for every species, covering a two-year period and giving details of its numbers month by month.

The Society now has species sheets covering eight years' fieldwork, which provide, not only an index to the logbook entries, but a valuable work of reference on the avifauna of the reserve. The status of a species, its preferred habitat, any fluctuations in its numbers, its times of migration, all are readily available. The sheets are a guide for decisions on conservation policy and management, and may prove invaluable in the protection of an area of considerable ecological importance.

During these two years, twelve species were 'new' to the Reserve; velvet scoter, smew, Egyptian goose, white-fronted goose, whooper swan, goshawk, avocet, little gull, razorbill, green woodpecker, tree pipit and redpoll.

The full list of birds recorded on the Reserve now stands at 178 species. Of these, 153 were recorded in 1983/84 and feature in the report, whilst those not represented are listed below, the date being given where there was only a single occurrence.

Slavonian Grebe		Wilson's Phalarope	Aug/Sept.82
Manx Shearwater	Sept.78	Great Skua	Sept.80
Shag		Iceland Gull	Aug.77
Garganey		Mediterranean Gull	Dec.79
Long-tailed Duck	Oct.80	Guillemot	Feb.80
Ruddy Duck	Aug.82	Turtle Dove	
Ruddy Shelduck	July 80	Barn Owl	Mar.77
Pink-footed Goose		Lesser Spotted Woodpecker	Oct.79
Marsh Harrier	May 80	Redstart	
Montagu's Harrier	July 80	Black Redstart	
Long-billed Dowitcher	Dec.79	Grasshopper Warbler	
Woodcock	Dec.82	Spotted Flycatcher	
Temminck's Stint			

The birds not recorded are accidental visitors to the Reserve, with the exception of the spotted flycatcher. This species bred on the reserve in the wooded area of Rockcliffe until 1981, but there have been no records over the last three years; it is sad that, for the first time in the Reserve reports, the spotted flycatcher does not appear in the main body of the text.

The species sheets giving full data for 1977 to 1984 may be consulted in the Field Studies Centre. The classified list which follows, seeks to summarise, and perhaps interpret the findings, to highlight the unusual in 1983/84, and to convey the pattern of events on the Connahs Quay Reserve.

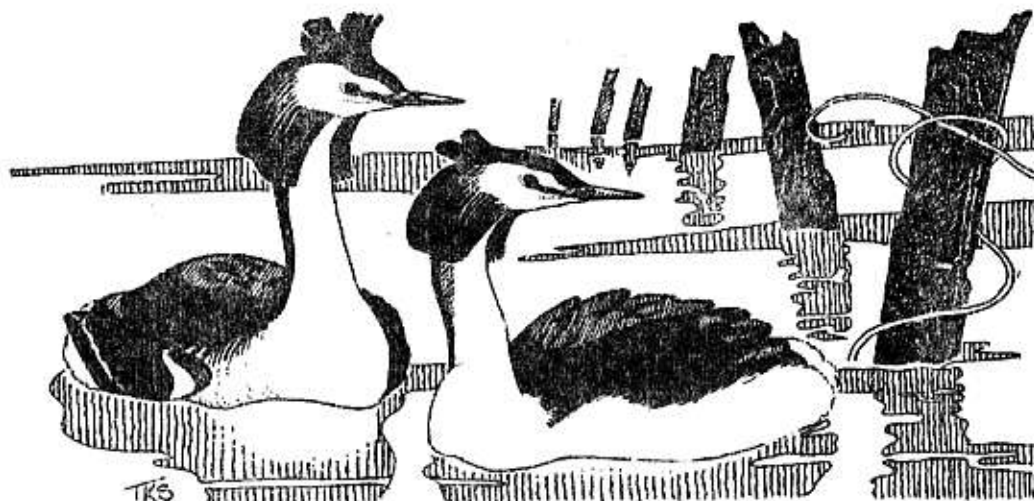
Key to the status of species

B	breeding	PM	passage migrant
R	resident	V	vagrant
SV	summer visitor	S	sporadic visitor
WV	winter visitor		

CLASSIFIED LIST OF BIRDS RECORDED IN 1983 AND 1984

GREAT CRESTED
GREBE

WV Records most usually come in the five months from October to February, when individuals wintering on the sea are brought close inshore by the flood of the tide, spend some time fishing in the canalised part of the Dee, and return to the open estuary on the ebb. October 83, the best month, had records of six singles as well as 2, 3, 5, 6 and 7 birds together, the maximum counts being on the spring tides of 22nd and 23rd. An unusual record was that of 5 April 83 when a pair on the river was giving the head shaking and false preening display.



LITTLE GREBE

WV Numbers are slowly beginning to build up again after the decline due to the hard winter of 1981/82 but have not yet regained their former level, the maximum counts being of 4 in November 83 and of 5 in December 84. A single frequented the fly ash lagoon in August 83 when an algal bloom covered much of the water surface.

FULMAR

V A deep low pressure centre approaching Ireland early in September 83, brought gale force westerly winds which forced many seabirds ashore, probably accounting for the fulmar's presence off the revetment on 11 September. The only record of the two year period.

STORM PETREL

V The squally day of 23 September 84, with its strong inshore winds, brought five of these petrels into the estuary at Connahs Quay along with Leach's petrel and three skuas.

LEACH'S PETREL

V Two birds inshore in the rough weather conditions of 23 September 84, and a single remaining on the calmer 24th. A further five sightings of petrel species on 23rd were thought to be Leach's.

2

GANNET

V The only record is of an ailing bird, resting on the Dee throughout the afternoon of 14 June 83, which was later found dead on the marsh.

CORMORANT

R WV Seen throughout the year with an increase both in frequency and in numbers during the winter months. The highest counts of 58 from February 83, and of 40 from October 84, are low compared with the winters of 1979/80 and 1981/82 with their maxima of 110 and 96 birds respectively.

GREY HERON

R WV Present on the reserve in all months of the year. Embankments on the west scrape and in the bunded pool afford roosts with some protection from the prevailing winds. Fewest records fall between March and May, but with the end of the breeding season there is an increase in numbers as newly independent young seek easy prey in the bunded pools. Fishing parties of four to six birds are then common, the highest count being of sixteen in September 84.

MALLARD

WV R Present all year with the largest concentrations seen on the high tides of winter. The peak count was of 800 on 4 December 83. Display is seen on sunny days throughout the winter and by January, most birds seem to be paired with numbers dropping from mid-March as birds leave for breeding territories. Females with young ducklings were noted each year. In 1983, numbers did not increase until August, but in 1984 there was a build up of moulting mallard from May and 560 were present on the mudflats on 30 June.

TEAL

WV These two years have seen a dramatic increase in the numbers of teal wintering on the reserve, such that the site is now of international importance for this species. October and November have been the peak months with three thousand birds counted during high tide periods on 7 October 83, 7 November 83, and on 23 November 84. Disturbance by civil engineering work on the revetment in the winter of 1983 caused numbers of teal to find refuge with other wildfowl on the bunded lagoon, and the spreading of grain here in winter 1984 has also attracted some hundred to feed and roost in close proximity to the east hide.

GADWALL

V A female was present with mallard on the fly ash lagoon on 20 November 83, and was noted among a raft of mallard on the Dee the following day.

WIGEON

WV Return to the reserve in August each year and are present in small numbers, usually fewer than fifty birds, until March. A count of 260 from 23 February 83, is the highest of the two years with a peak of only 80 from September 84. Conservation work to keep vegetation short on the margins of the marsh scrapes has been successful in attracting wigeon to graze here more regularly than in previous winters.

PINTAIL

WV A few birds are back on the Dee in August with the main presence from September to March. Though large numbers, three thousand on 7 November 83, may be seen rafting on the Dee, or fighting in skein after skein over the Wirral, the numbers on the Welsh side of the river remain comparatively low. The majority of reserve records concern fewer than 20 birds.

SHOVELER

PM WV The increase noted in the last report has continued and for the first time, shoveler have been present over the winter months, particularly favouring the fly ash lagoon. Spring and autumn passage birds noted as is usual each year, with 10 on 23 August 83. Up to five were regularly recorded from December 83, and the group built up during early 1984 to reach 13 on 24 February.

- MANDARIN DUCK V A female feeding with mallard on 7 November 83 was the second record for the reserve. Perhaps a bird from the feral population on the Dee near Eccleston which has become established from birds from the Eaton Estate.
- SCAUP V One record only of a male on 5 November 83.
- TUFTED DUCK S A female present on the Dee from January until March 83, was regularly to be seen on the bunded pool, in company with goldeneye. Otherwise this species is an incidental visitor, with records of from one to three birds falling in September, October and November 83, and in the first months of 1984. No sightings since May 84.
- POCHARD WV An irregular winter visitor to the freshwater areas of the reserve, usually in ones and twos, though two pairs were on the bunded pool on 4 March 84. Sixteen records in the two years, spanning September to March, is an increase in frequency over previous years.
- GOLDENEYE WV Regularly and frequently present in both years from October through to April. The reserve has recorded good numbers of goldeneye over the years, and 1983 was no exception with eight to twelve birds usually present on the bunded pool in November rising to 17 including a fully adult male on 24th. 1984 has shown a disappointing drop in numbers with no more than six birds at any one time.
- VELVET SCOTER V The first scoters to be recorded on the reserve were a party of velvets, four males and two females, which came in off the sea on the high tide of 23 October 83, closely approaching the west hide and giving good views of the white wing patches as they preened and bathed. The predominantly east coast distribution of this marine duck in the British Isles makes its presence on the reserve a remarkable event.



4
RED-BREASTED
MERGANSER

S The decline in numbers on the reserve reflects a decline of this species on the Dee. Sadly there has not been any record of groups of mergansers on the bunded lagoon in the past two winters though this was a favoured feeding area in previous years. The eleven records in 1983, with a maximum of 3 birds, dropped to only four records in 1984, which were of three singles and a pair.

SMEW

V Another first for the reserve, when this attractive little sawbill was observed with goldeneye in the banded pool on 18 December 83. It was present on the pool, again with goldeneye, on 19 December 83 and on 4 January 84, and was seen on the Dee and west scrapes on 4 February 84. This was probably the female/immature which wintered on Shotwick lake from 24 December 83.

SHELDDUCK

WV R The greatest numbers are present in the winter months from October to February, and counts can most easily be made at full spring tide when the birds roost afloat on the flooded Oakenholt marsh to await the uncovering of their feeding grounds on the intertidal mud. Peak counts were made on 7 October 83 of 400 and on 22 December 84 of 374, maintaining the high numbers of the previous two years. 1983 was a good year for young on the reserve: a pair with six ducklings was in confrontation with a second pair on 6 June, and adults with young are recorded through June and July. In contrast, 1984 produced only one record of a pair with six young. In most years there is a presence of birds of the year on the reserve with some adults throughout the period of the moult migration of adults; 1984 was unusual having a prolonged absence of birds from 12 August into October.

EGYPTIAN GOOSE

V A single, probably an escaped collection bird, was resting on the foundations of the light in the Dee channel on the morning of 26 December 84, but was moved from this roost by the incoming tide.

GREYLAG GOOSE

V Four records during this period, of 2 on 9 April and 2 on 16 April 83, with singles on 29 October and 11 November 84.

WHITE-FRONTED GOOSE

V The three adults which flew from the estuary south-east over the power station on 27 December 84, were the first record of this species on the reserve.

BRENT GOOSE

V There were three sightings of this goose in 1983; singles on 24 October and 2 December, and three together on 4 November. No records from 1984.

CANADA GOOSE

V Irregular singles on five dates over the two years, and two together on 1 April 83.

MUTE SWAN

S Most sightings are outside the breeding season, with nine records involving one, two or three birds in 1983 and eleven records from 1984, including up to three adults and two immature birds which spent some time on the fly ash lagoon and west scrapes during November. The decreasing number of mute swan records reflects the reductions in the herd on the Dee, and is indicative of the still more widespread decline of this beautiful bird.

WHOOPEE SWAN

V The first reserve record of this species constituted something of a triumph for the Society. The single whooper was first seen on the river on 3 January 84, but there were fears that it was an ailing bird by its continued presence over four days. Its rescue involved the launching of the Flint Inshore lifeboat crewed by lifeboatmen and bird ringers, a visit to Chester Zoo veterinary department, and a hospital pen at the Wildfowl Trust Reserve at Martin Mere. Here it was ringed, x-rayed and treated for lead poisoning with such success that on the day of its last injection it flew from the pen and joined the herd of 117 wild whoopers then wintering at Martin Mere and the Lancashire mosses. Though this was the first of this species to be recorded on the reserve, there were others in 1984; 7 were present on 14 November, whilst an immature bird joined a family of two young mute swan with an adult, on the fly ash lagoon and marsh scrapes on 24 and 25 November.

BEWICK'S SWAN

V Not recorded during 1983, and only three records for 1984. A party of three adults and one immature was noted on the bunded pool on 24 January, whilst a similarly composed group, perhaps the same birds, grazed the upper saltmarsh at Oakenholt throughout the day on 10 February. On 27 December 84, a day on which the Severn valley, traditional wintering grounds for a herd of Bewick's, was suddenly obliterated by a snowstorm, there were 18 adults and an immature at Connahs Quay.

BUZZARD

V A single record from 1 September 83. A buzzard came from Burton area and passed low over the bunded pool where roosting greenshank and lapwing were panicked into flight. The lapwings together mobbed the raptor which flew steadily and unheedingly on to inland Wales.

SPARROWHAWK

R A change of status for this raptor on the reserve. Until 1983 the sparrowhawk was a predator of the finch and wader flocks which congregated on the saltmarsh in winter. In 1983 and 1984, however, it has been seen on the reserve in all months except June. The fifty sightings of individuals, and two records of two birds together, compare with twentyseven sightings in 1981/82. Both sexes have been recorded and an immature bird was present in August 83.

GOSHAWK

V Yet another 'first' at Connahs Quay: there are two records from 1984. On 30 September a female came across the Dee, under mobbing from gulls, to land in the grazing fields. The gulls continued to attack the hawk on the ground and were joined by crows and magpies, until a female sparrowhawk from the Rockcliffe woodland also swept into attack. At this the goshawk took flight and was pursued by the sparrowhawk across the reserve. The large raptor continued its flight inland whilst the sparrowhawk returned to the woodland. On 7 October, a goshawk was disturbed from one of the fence posts on the marsh road. It left the reserve across the saltmarsh putting a short-eared owl to flight.

HEN HARRIER

WV A predator regularly quartering the reserve scrapes and pools from November until March. Often hunts over Oakenholt marsh in the early dusk of winter days before going to roost. Both sexes equally recorded, with male and female present together on five dates and two males together on 25 February 84. In the winter of 1983/84 a young male in grey adult plumage save for traces of brown feathering on the wing coverts, hunted the reserve, and was known to join the communal roost off Parkgate.



HOBBY

SV There are seven records of this dashing little falcon between 28 July and 19 September 1983, and there seems to have been an established flight path between the saltmarsh, over the marsh road and across the grazing fields toward the woodland at Rockcliffe.

PEREGRINE

WV The number of logbook entries relating to this species has continued to escalate from the three reported for 1977/78 to thirty-three during 1981/82 and now to sixty-nine during 1983/84. At least three individuals have hunted the reserve in each of these two years, for immature birds have been seen as well as adults of both sexes. Indeed on the spring tide of 23 October 83, there were three peregrines at one time working the wader roosts and scattering the teal on Oakenholt marsh. Present from August through the winter to April, with isolated records from June 83 and July 84.

MERLIN

WV The previous report recorded a decline in the number of sightings of merlin on the reserve and underlined fears for the success of this small raptor as traditional moorland breeding areas succumb to cultivation. It is encouraging therefore to find an increase in records for both these years, with regular sightings from September to February. Singles only were reported in 1983, but a pair were together on 13 February 84, harrying and taking skylarks, and two were over the saltmarsh in November.

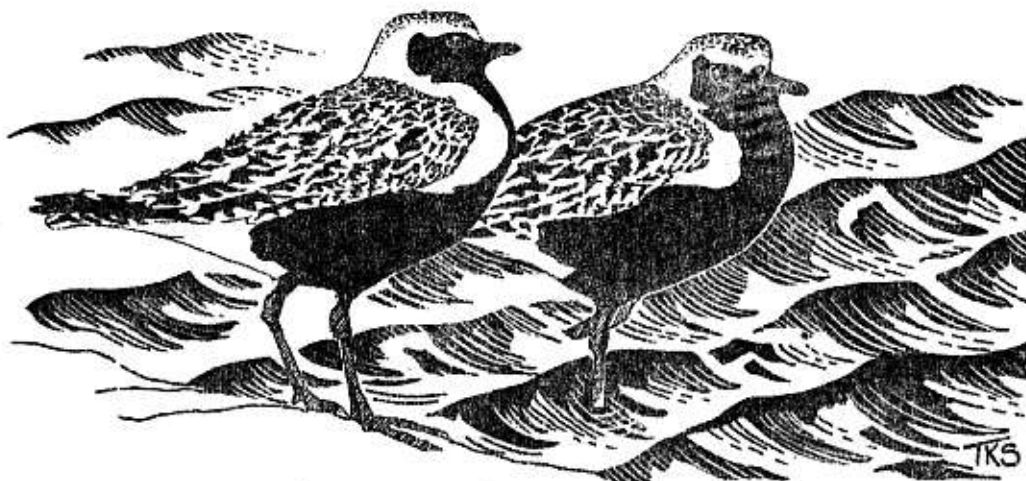
KESTREL

R B A pair is regularly recorded on the reserve and in 1983 there was evidence of successful breeding with an adult and immature together in the nature trail on 16 July and three on 10 September. On 23 September, the body of a male kestrel was found by the East hide, but an immature male was still present later that month, and in November there were two males on the reserve as well as a female. Although a pair was displaying early in 1984, and still together in April, there were very few sightings at all from late May until August, and no subsequent records of a pair or young.

- RED-LEGGED PARTRIDGE A red-legged partridge found wandering in gardens adjacent to the reserve on 30 April 83, and reported to the Society, was caught and introduced to the reserve for its protection, but was not again recorded.
- PARTRIDGE R B In both years paired birds have been in evidence through March and April. The few sightings in May, June and July perhaps indicate the shy behaviour of this bird rather than its absence, for adults with young are noted from August. The largest covey from 1983 was of 11 including young birds on 14 September, but there were no records of coveys over the winter as there have been in 1984 with a maximum of 21 on 30 December.
- PHEASANT V Singles only recorded: a female on 9 June and again on 17 July 83 and a male on 25 December 84.
- WATER RAIL V One bird was seen on 7 January 84 when it made its way across open ground in front of the centre hide before disappearing into the rank vegetation.
- MOORHEN S 1983 has two records from August, a single in the creek near the west hide on 8th and one on the fly ash lagoon on 23rd. On 14 April 84, a moorhen was again on the bank of a creek near the west hide.
- COOT V A coot on the fly ash lagoon on 26 August 83 was seen on the river channel on the following day.
- OYSTERCATCHER WV R To be seen on the reserve in all months of the year. Over the winter months up to 400 congregate on Oakenholt marsh to roost out the high tides, but in 1984 the peak numbers again occurred in spring with the highest ever recorded count of 3,250 on the river edge on the early morning of 29 April. This spring peak was first apparent in 1981 and 1982, but not so in 1983. Display, piping parties and mating were noted, and each year there were attempts at nesting, unsuccessful when the upper saltmarsh was flooded by spring tides.
- LAPWING WV R Scarce during the breeding season, numbers build up in June when young birds congregate to roost in the protection of the retaining bank around the bunded pool. In the winter months a regular high tide roost of up to 500 birds is maintained on the upper saltmarsh at Oakenholt. 1,500 here on 23 December 84 was exceptional. In both years the flock has included a leucistic individual, two in 1984, with the whole of the upperparts sandy brown, and the primaries white.
- RINGED PLOVER PM Markedly fewer than in previous years. In 1983 only singles were recorded until autumn passage brought a maximum of 22 on 27 July. In contrast there were a few spring passage records in 1984 with 40 on 18 April, but only three autumn records totalling five birds.
- LITTLE RINGED PLOVER PM One in flight over the reserve on 24 April 83 was the only record of the two years.

GREY PLOVER

PM WV Lone birds are casual visitors to the reserve saltmarsh in any of the winter months, and in November 84 a bird spent some time foraging on the bunded pool. Two summer plumaged birds were a magnificent sight on the evening of 9 August 83. The only group records were of 12 on 9 September 83, 17 on 14 October 84 and 10 on 30 October 84.



GOLDEN PLOVER

PM WV Despite the presence of golden plover roosts locally at Sealand and at Shotwick, this species is uncommon on the reserve. Four records in 1983 included one of 20 with a large lapwing flock on 19 August. Of the seven records in 1984, four occurred during December with a maximum of 20 on 9th of this month.

TURNSTONE

V The saltmarsh sand and mud of the upper estuary provides no suitable habitat for this species, which is therefore an unusual visitor to the reserve. A party of 10 on 5 January 83 and three isolated records of singles during 1984 are the only occurrences.

SNIPE

PM WV Always more common in the last five months of the year, though there was a different spread of records in these two years. 1983 had a marked autumn passage giving a peak of 9 on 19 August and twenty-six records from this month alone. In contrast, snipe have been more numerous over the winter months of 1984 with 14 flushed from the saltmarsh on 24 December. The reticent habits of the snipe probably result in its going unobserved on the saltmarsh areas except when forced into flight by the highest of tides.

JACK SNIPE

PM A single on the fly ash lagoon on the evening of 1 September 83, is a second record for the reserve following one in July 79.

CURLEW

PM WV Absent for only a few weeks of June, curlew numbers soon increase as the birds return to the estuary from their moorland breeding grounds with peaks of 150 on 23 August 83 and 130 on 19 September 84. In late summer they favour the grasslands of the grazing fields but as winter progresses and numbers drop to 30-40, the saltmarsh becomes the preferred area. The bubbling song hangs over the marsh on sunny days from late January and there is a small build up in numbers as migrants move through in March.

WHIMBREL PM Both years had very clear movements of whimbrel in April/May and July/August, though the return passage in 1984 was more protracted with the last birds through 8 on 20 October. More numerous in 1983, with 36 on the channel mud on 8 May being an unprecedented count, and a more usual autumn peak of 15 birds. Spring peak in 1984 was 13 on 26 April, and in autumn 11 on 2 August.

BLACK-TAILED GODWIT PM WV The tendency to overwinter on the reserve, first noted in 1981 and 1982, was pronounced in 1983. Under the Ramsar Convention, a site is of international importance for this species if it regularly supports a population of 400 such birds. Peak counts on the reserve have been, in 1983: January - 650, February - 500, March - 500, November - 1700, with more than 1000 on six dates in this month, December - 1200, and in 1984: January - 1000, February - 1000, November - 600, December - 250. The drop in the latter two months resulted from the excessive flooding of the Shotwick fields which attracted a large part of the flock. However, the importance of the saltmarsh at Oakenholt for the black-tailed godwit is now very clear.

BAR-TAILED GODWIT PM Not so numerous, nor so frequent as in previous years with only eleven logged entries for this species for the two years, all of fewer than ten birds save for 65 on 2 August 84.

GREEN SANDPIPER PM WV Not such good years as 1982, nevertheless there were 32 sightings between August and October in 1983 and 24 in 1984. All are of singles or twos. A bird overwintered in December 83/January 84, and was much in evidence in February 84. The last recorded bird at the end of 1984 however was on 8 November.

WOOD SANDPIPER PM This is a wader to be found on the reserve only on return passage. Singles on 30 July and 2 August 83, and in 1984 on 2nd, 7th and 10th July, with two together on 4th.

COMMON SANDPIPER PM The mild winter of 1982/83 encouraged at least two birds to remain and there were regular sightings from January until March 83 and the onset of spring migration. However there are no records for the winter months of 1983/84 or the end of 1984. April was the peak of spring passage in both years with the more leisurely autumn journey spanning July and August. It is at this time that common sandpipers join an evening roost on the islands of the bunded lagoon, where numbers reached 22 on 12 July 83, the 1984 peak being of 20 at the west end of the reserve on 14 July.

REDSHANK WV R The creation of scrapes on Oakenholt marsh raised islands and bunds which remain uncovered on all save the highest of tides, and here is a new traditional roost for several hundred of these birds from August through to March. Counts between 200 and 600 are usual with the peak of 950 in September 83 being close to the previous best ever count on the reserve of 1000 in February 82. This number, however, was reached several times during 1984, and at least 3000 birds were present on 23 November. Pairing birds may be seen in display from February, and occasionally song flights are recorded, but no breeding attempts have been noted on the reserve, and by May few redshank remain.

SPOTTED
REDSHANK

PM WV The numbers recorded in 1980 and 1981, up to 100 birds, declined dramatically in 1982, when the maximum reached only 18 birds. Records in 1983 and 1984 have shown an encouraging increase in this elegant wader which ranks as one of the 'special' birds of Connahs Quay reserve. Migrants return from July with one or two birds still resplendant in summer-black plumage, but highest numbers occur from August to October with 30, 25 and 11 the monthly maxima in 1983, and 13, 23 and 26 in 1984. In both years modest numbers remained over the winter, their pale grey plumage standing out against the warmer browns of the common redshank.

GREENSHANK

PM The reserve is a staging post for migrating greenshank on their autumn journey south, and the musical three-note call hangs over the saltmarsh during the three months from July. The margins of the bunded pool are a favourite roost and 20 were here on 19 August 83. 1984 was not such a good year with only three birds scraping through for July in the last days of the month, and a peak of 10 on 25 August, but passage was more protracted with 5 birds through in October, one on 1 November and 4 on the following day.

KNOT

PM WV Despite the numbers wintering on the Dee, the species rarely visits the saltmarshes of the upper estuary. Four bird days in January and February 83, with 6 on 1 January the largest group, and only two dates in 1984 of 7 on 31 July and 15 on 14 October.

LITTLE STINT

PM The entries for 1983 may indicate late autumn passage, with five records between 11 September and 25 November, departing from the usual pattern of sightings which fall in August/September: one on 11 September, a total of 7 on two dates in October, 6 on 24 November and 4 on 25th. Alternate years have been good ones for autumn passage little stints on the reserve, with 1978, 1980 and 1982 the lean years. 1984 was no exception, with not a single record for this species. The lack of spring records for this species on the reserve correlates with evidence that the main return route from W.Africa is north-east across the Sahara and Mediterranean.

DUNLIN

PM WV Most numerous at time of passage, with a concentrated rush through on the journey to the breeding grounds in the last week of April or first week of May, and a protracted and leisurely return as wave after wave move southward throughout July and August. Spring passage in 1983 peaked at 1500 on 29 April and 300 on 30th and in 1984 at 5000 on 4 May, 1000 on 13th and 550 on 15th. In July records of several hundred returning migrants are frequent, with peak counts of 1300 in 1983 and 2000 in 1984. After a drop in numbers in September and October, there is an increase again to 200-300 overwintering in November/December.

II
CURLEW
SANDPIPER

PM Only recorded on autumn passage, the spring migration route being easterly as in little stint. Indeed, it is suggested that young birds of the year migrate further west than the adults, the westward edge of autumn migration comprising weather displaced, less experienced birds. In 1983 the records show a great spread similar to those of the little stint, with a single and three twos during August, one showing traces of summer plumage on 4 September, 2 on 23 October and one on 6 November. Again as for the little stint, there were no 1984 sightings.

- SANDERLING V Rare on the reserve which has little to offer this sandy-shore loving wader. The only record of the two years is 15 on 6 May 84.
- RUFF PM It was only in 1981 that this species was observed to be frequenting the fly ash lagoon on autumn passage, and there was a continued presence of ruff throughout August and September in this year and in 1982. There were fewer sightings in 1983 with nine singles and two records of two together. A small flock of 16 was seen to fly up the channel on 9 August but did not alight, and veered off toward Burton. 1984 was still more disappointing with only a single record on 4 August. It may be that the fly ash lagoon, the only area of the reserve which seemed to attract the ruff, did not provide adequate feeding in this year. Certainly it was not used by migrant waders in any numbers in 1984.
- AVOCET V A first for the reserve! The avocet was found on the bunded lagoon on the morning of 1 April 84 where it was feeding vigorously. It left the pools to drop out of sight on the exposed mud of the river channel at midday but it was back on the pools for lengthy periods during the following two days, using this area to roost out the high tide and interspersing now more leisurely bouts of feeding with resting, bill in scapulars. Not seen on the 4th, on the 5th it was feeding in the channel at the west end of the reserve, before apparently moving away from the estuary. This is the second consecutive year that there has been a disruption of avocets in late March: in 1984 the cause was a vigorous north/south front which brought high southerly winds and heavy rain overnight on 24 March. The bird at Connahs Quay was one of many reported far astray such as one at Malltraeth (Gwynedd), also on 1st, several in the Midlands and North East England, and some birds reaching as far north as Scotland's Moray Firth.
- SKUA species V The turbulent weather conditions which prevail to bring skuas into our estuary add to the problems of specific identification. A skua harrying gulls over the estuary on 4 September 83 was thought to be an arctic. In 1984, high winds on 23 September brought seven records of skua over three days.
- ARCTIC SKUA V A single on 23 October 83, and another on 24 September 84.
- GREAT BLACK-BACKED GULL WV R Present throughout the year in small numbers, with non-breeding immatures from March until the breeding birds return in July and numbers increase to an autumn peak of c20 both years.
- LESSER BLACK-BACKED GULL PM Recorded in all months with the highest numbers occurring from July to October. Two counts from 1983 of 350 on 13 July and 280 on 9 August reflect similar concentrations in 1980. Otherwise numbers are more modest with a peak of 40 in September 84.

HERRING GULL

WV R Present in small numbers in every month with a predominance of immature birds throughout the breeding season. It is now known that one of the herring gulls wintering at Connahs Quay is a Scottish breeding bird. It is colour ringed black/green left, and yellow/black right, and was so ringed as a 3rd year male on 19 April 79 at Helensburgh rubbish tip, near Loch Lomond by a research team from the University of Glasgow. It was in Durham in October 79, and back at Helensburgh in the summers of 1981 and 1982. First recorded on the reserve on 5 December 82, this individual was regularly present on the bunded pool until 9 February 83. At the end of 1983 it returned on 3 December, being recorded on eleven dates until 15 February 84. An early return was made at the end of 1984, on 24 September, and the bird was still present at the turn of the year. Its regular roost is the small barren island in the bunded lagoon, alone in 1982/83, but often with a 3rd year herring gull in 1983/84 and with an adult in 1984/85 - perhaps a mated pair? Of further interest are two records from 7 and 13 July 84, of a yellow-legged herring gull. The taxonomy of the herring gull is complex, but summer records of yellow-legged adults are likely to be of a race from Southern Europe, part of the northwesterly post breeding dispersal from the Mediterranean.

COMMON GULL

PM WV Absent from the reserve for 8-10 weeks during the breeding season, and most regularly recorded in January, February and March, with the highest numbers falling in autumn, 30 in September 83 and 70 in October 84. This gull is present in thousands on the estuary for the evening roost, and a steady stream of gulls overhead, following the Dee flight path, is a feature of late afternoons on the reserve.

GLAUCOUS GULL

WV Three records from this period follow the only previous record from November 79. One with herring gulls over the bunded lagoon on 12 February 83; one on 16 October 83; an immature flying west on 29 December 84.

LITTLE GULL

WV Three records, all from early 1983, give a new addition to the list of species. On 30 January, an immature; an adult flying up-river on 13 February, and an adult on 20 March.

BLACK-HEADED GULL

R PM This opportunist gull is common and numerous on the reserve, and may be seen in all months and plumage types except downy young. Kleptoparasitic behaviour is noted, and several species are harassed to give up food, among them lapwing, goldeneye and common tern.

KITTIWAKE

V Force 8 westerlies and driving rain accounted for an adult and juvenile on 1 February 83. In 1984, one on 15 January, and two juveniles on 30 September.

BLACK TERN

PM 1983 was a good year for seeing this species with 2 birds feeding from the water surface off the west hide between 7 and 10 September. One on 10th roosted on a floating log moving slowly down the estuary on the ebb. A further record comes from 6 October. In 1984 there was one only recorded on 30 September.

COMMON TERN

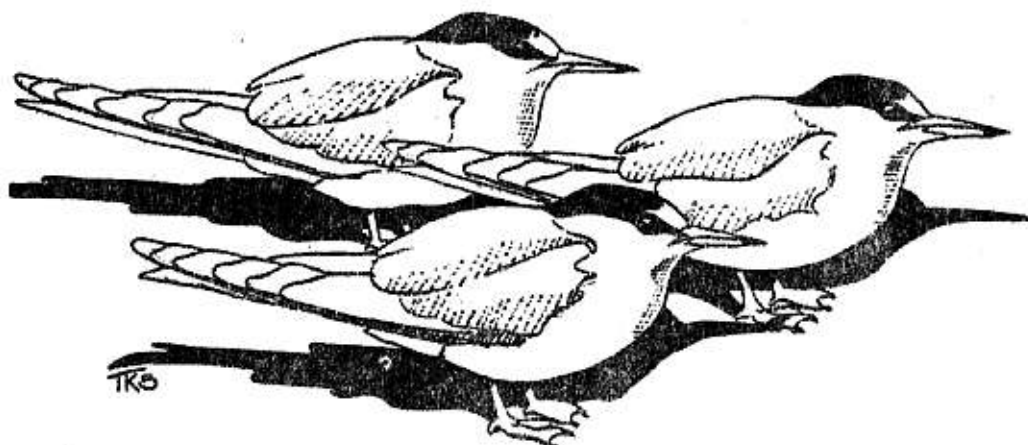
SV The first birds return towards the end of April, and from then until August this species is a regular visitor fishing the bunded lagoon, and commuting up and down the Dee to the tern rafts at Shotton. The proximity of this breeding colony occasionally results in such records as the adult feeding a young bird on 19 July 83, and a pair in courtship feeding display on 25 April 84.

ARCTIC TERN

PM One on 30 April 84 is the only logbook entry for the two years.

LITTLE TERN

PM This attractive tern has usually been seen during the post breeding dispersal, probably from the colony at Gronant on the Welsh coast. In 1983, however, there were three records of singles and twos from May. Numerically 1983 was the best year yet recorded with 26 feeding and roosting at the mouth of the stream on 21 August the high spot. 1984 proved disappointing with only two sightings - one in the strong westerlies of 9 September, and a late bird hunting over the edge of the tide for four hours on the morning of 8 October.



SANDWICH TERN

PM Two on 23 June is the only record for 1983, with two roosting on the bunded pool on 14 June, and two roosting with waders at the mouth of the main creek on 27 August noted in 1984.

RAZORBILL

V The lone razorbill on the river on 7 January 84 is the first record of this species of auk on the reserve.

STOCK DOVE

SV WV Most records fall between April and September, and 1983 was typical of this spread with between one and four of these doves recorded regularly. In 1984, records have been fewer, but have involved larger groups of birds, and included winter groups of up to 7 in January, 12 in February, 17 in July and a maximum of 30 feeding on the saltmarsh bordering the nature trail on 4 August.

WOODPIGEON

R It is difficult to establish from the records the true numbers of woodpigeon foraging on the reserve, since the main presence is on the grazing fields adjacent to Rockcliffe where the hedgerows and mature trees afford a roost, and it frequently goes unrecorded. It is much in evidence in spring; the largest flock was of 50 on 11 March 84.

- COLLARED DOVE R A species which is certainly under-recorded, though it is never present in strength. Only the urbanised fringe on the reserve's inland boundary seems to be to its liking, and one or two may be seen here.
- CUCKOO SV The twenty sightings over the two years come mainly from May with records of juveniles in August 83. Many records are of individuals commuting between the nature trail and the steelwork's reserve which is a good breeding area. The first arrival was not until 13 May 83, but return was earlier, on 23 April, in 1984.
- LITTLE OWL SV B It was in 1980 that a pair first took up residence on the reserve, and one young was raised in that and the following year. After the lack of breeding success in 1982, it was good to have a pair back on the reserve in February 83. Mating was recorded on two occasions in early April and a young owl was on the wing in June. This success was not to be repeated in 1984 when only one bird returned in February, and was recorded infrequently until 26 May. Only once were two birds recorded together, in June, after which there were no more sightings.
- TAWNY OWL S An elusive species which may be present more often than we know in the Rockcliffe area, where there are three records from 14th and 17th March 83, and 4 April 84.
- SHORT-EARED OWL WV This day hunting predator is nomadic in habit, seeking out areas of abundance of the small mammals upon which it depends: its presence on the reserve fluctuates accordingly. Winter 1983/84 was the best year ever recorded with twenty-one sightings between October and April, including two of 2 birds together. Winter 1983/84 had only eight sightings from December to February and it seems that winter 1984/85 may see further decline with only one record from each of October and November.
- SWIFT SV 1983 brought the first April record, of 3 on 29th, for this species which more usually arrives toward the end of the first week of May. From then on numbers up to 60 birds regularly hawk for insects over the standing water on the reserve, until they make a quite abrupt departure in mid-August.
- KINGFISHER WV The reserve had no records of kingfisher since the hard freeze in January 82 until a male took up a winter territory in November 83, especially favouring the west end of the bunded lagoon where he could fish from a perch on the bridge. After February 83 there was a temporary lull in records until the end of the breeding season brought a kingfisher to the reserve in August. Since then it has been a regular attender at the bunded lagoon, though most frequently seen there during October. There were two individuals present on at least two dates.
- GREEN WOODPECKER V An unlikely record for the reserve, and the first of this species. On the evening of 15 April 83, a green woodpecker flew over the reserve and crossed the Dee to land on the revetment. On 17 April, it was seen calling from the trees by the gatehouse.

GREAT SPOTTED
WOODPECKER

S Occasionally found in the silver birch and willows which screen the bunded lagoon. One was here on 12 March 83, a male on 23 April 83, and a female on 6 August 83. The only record for 1984 is of one on 8 July.

SKYLARK

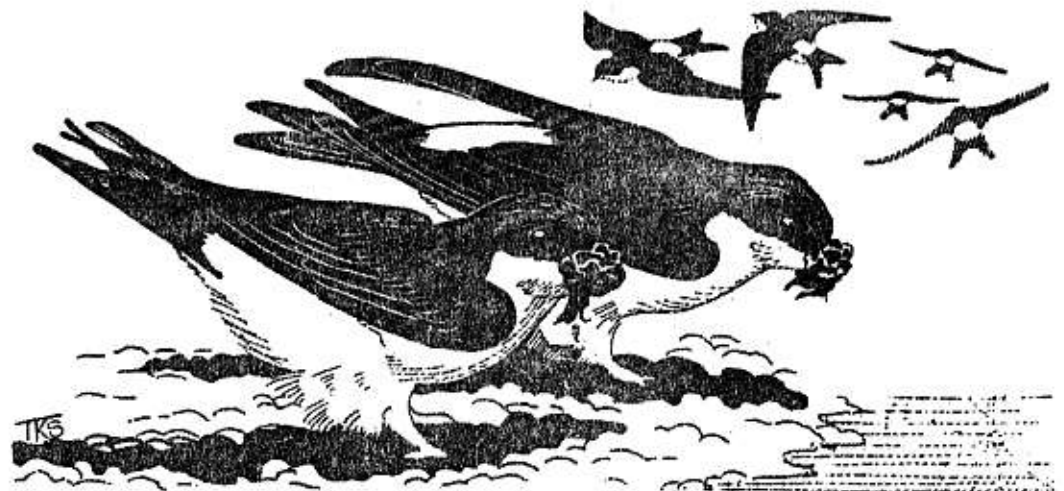
WV R B Suitable nest sites are provided by the grazing fields and upper saltmarsh, whilst migrant and wintering birds find a plentiful supply of seed washed onto the marsh and available for the colder months. Peak counts were of 85 in December 83, 100 in January 84, 200 in October 84 and on 23 November 84, a windy day with the tide completely covering the marsh, over 500 were on the wing.

SWALLOW

SV The first returning migrants were on 16 April both years. Numbers swooping over the fly ash lagoon built up to a peak 150 birds in May 83 but numbers remained at a low level in 1984. June is a quiet month after which the birds return with young strong on the wing, and feed over the reserve until their departure south. In 1984, despite low spring numbers, these were at a normal level after the breeding season. Most swallows have left by the end of September, but laggards went through on 11 and 15 November 84.

HOUSE MARTIN

SV The pattern of records closely follows that of the swallow, though numbers were not noticeably reduced in Spring 1984. The hot dry weather in this year forced several birds to collect mud for nest building from the fly ash lagoon, and there was a flight line of birds over Oakenholt marsh returning to the buildings along the coast road. There was a visible migration of house martins following the Dee to its mouth on 24 September 84.



SAND MARTIN

PM 1983 was a better year for sand martin on spring passage than the previous two years, with up to 40 over the lagoon in April increasing to over 50 in May. Autumn passage records are of a single and of 25 on 14 September. The numbers in 1984 were disastrously low, only eight records, a total of 25 birds, in spring and a lone individual in early autumn. The sand martin has been one of the species hardest hit by the long continuing drought in the Sahel region of Africa. Breeding colonies in Clwyd now seem to have been reduced to only two, and these are small.

- RAVEN WV A pair of raven were on the estuary in early 1983 and were seen overflying the reserve on 9 January. On 9 February, they flew over to land on a pylon in the nature trail, and here there was some display before they took flight across the Dee toward Burton, being mobbed by angry crows. On 5 February 84 a pair flew, calling, across the Dee and continued over the reserve inland.
- CARRION CROW R Always present in twos and threes and catholic in its taste - grazing fields, saltmarsh, foreshore, all are used for foraging. Two gatherings at the fly ash spoil heaps were observed in 1983 of 22 birds on 8 March and 34 on 7 May, but this behaviour was not recorded in 1984. A pair had territory in the nature trail and an adult was feeding young here on 1 July 84.
- ROOK S A species not common to the reserve. There were seven logbook entries in 1983, all 1-3 individuals save for the flock of 30 which came to feed on the field near the east hide on 9 September. Only two records of singles in May of 1984.
- JACKDAW SV This small corvid is specific in its requirements on the reserve. It is present only for a ten week period spanning April and May, when groups congregate to feed on the grassland by the east hide. This is the time of finishing nest building, laying and incubating. The jackdaw nestling period coincides with the larval stages of various defoliating moths, and the adults then abandon the reserve and its grassland to forage in tree canopies elsewhere. The period of grassland feeding was noticeably later in 1984 with the peak in May and continuing to early June. Maximum count 80 on 15 April 83.
- MAGPIE R B Recorded throughout the year with up to ten on the reserve in pairs or family groups.
- JAY R A sporadic visitor to the reserve in past years, this colourful member of the crow family has become regular in the Rockcliffe area where it is most in evidence during April. No more than two birds seen at a time.
- GREAT TIT R B At least one pair was successful in raising young on the reserve in each year and it is in mid-summer that the great tit is most readily seen. Occasional records of individual birds from the winter months.
- BLUE TIT R B Adults with newly fledged young were present each year, the favoured area being that of the willow and birch screen between the hides where a party of 12 was feeding on 1 September 83. Numbers in 1984 were few.
- COAL TIT S The single bird with a party of long-tailed tits at Rockcliffe on 19 December 83 is the only record of the two years.
- 17 LONG-TAILED TIT S What an exceptional year 1983 proved to be for this species on the reserve. With one record in 1977, one in 1979, and three in 1980, this is quite a rare visitor, yet there are fifteen records from 1983, four from March/April of singles and pairs, and eleven sightings of from three to eleven birds during October, November and December. The parties foraged the Rockcliffe hedgerows, worked the line of trees bordering the railway, and even ventured into the birches between the east and centre hides. They attracted other unusual birds to the reserve such as nuthatch and treecreeper. In 1984 there was not a single record.

- NUTHATCH S One with seven long-tailed tits in willows near the east hide on 1 October 83 is the second record for the reserve.
- TREECREEPER S One working the ash trees bordering the east field with eight long-tailed tits and two blue tits on 1 November 83, is the reserve's third record.
- WREN R B Frequents the tangles of bramble on the reserve between the hides, in the nature trail and at Rockcliffe. The absence of records in early summer each year may be the result of skulking behaviour at this time rather than the absence of the bird for an adult with young was seen in August 84. Largest numbers are recorded in early winter, the 7 birds in the nature trail on 20 November 83 and the 5 there on 26 December 84 probably represent only a part of the wren population on the reserve in those months.
- MISTLE THRUSH R B Most numerous on the reserve in early summer following its successful breeding in each of these two years with a maximum of 14 on 15 July 84. On 11 June 83, an adult was solicitously feeding a young bird but broke away to mob the male kestrel as he came over.
- FIELDFARE WV PM After being scarce on the reserve in the winters of 1981/82 and 1982/83, there was an influx of fieldfare in December 83/January 84 and 160 fed alongside 30 redwing in fields bordering the nature trail on 25 January. At the end of March/beginning of April 84, there was a marked passage of birds, twenty to a hundred at a time. December 84 brought small numbers, with hordes of redwing, to feed on the profusion of hawthorn berries at Rockcliffe.
- SONG THRUSH R B The logbook entries do not reflect the true status of this thrush on the reserve. There is a continued presence at the top of the nature trail where the abundant snails prove an attraction. There is a dearth of outcropping stone here though, and hard rough patches of ground are used as anvils, and left littered with broken shells. An adult was carrying food in the nature trail in June 84 indicating successful breeding in this season.
- REDWING WV The numbers of redwing on the reserve each winter are very variable. Only a single bird was recorded in December 83, though up to 70 were present until the end of January 84. The mass of hawthorn berries remaining on the Rockcliffe hedgerows attracted large numbers here in December 84 and on the morning of 24th an estimated 500 birds moved through, feeding as they went.
- BLACKBIRD R Although paired birds are evident in the spring, in neither year is there a reliable record of a successful brood, yet the blackbird has bred in previous years.
- 18 WHEATEAR PM A well defined spring passage, with a more diffuse autumn passage, as is usual in this species. The first returning birds were on 20th and 24th March respectively. In 1983, however, wheatears were moving through during the whole of April and May, whilst in 1984, most of the passage was in April, with only three May records involving six birds. Peaks were 14 (8 males) on 21 April 83, 10 pairs on 6 May 83, and 14 on 16 April 84.

STONECHAT

S R? The last report underlined the decline of the stonechat on the reserve, with a failure to breed in 1981, and its complete absence since July of that year. There were isolated occurrences in 1983 on 1 May and 19 September, but neither bird remained. The closing months of 1984 have looked more hopeful. A stonechat was seen in the nature trail, the chosen territory of previous pairs, on 28 October and again on 29 October, and a male bird was present here throughout the last few days of the year.

WHINCHAT

PM A marked spring passage in both years during the three weeks from c20 April. More numerous in 1983 than in any earlier year with a count of 13 on the reserve on 7 May, the numbers in 1984 returned to the more usual, groups of one to three. Only one autumn record from September 83.

ROBIN

WV From September through the winter to April, robins are recorded from the willow screen between the hides and from the nature trail, with 7 individuals on 22 January 84. In neither year is there any evidence from the summer months to suggest that robins remained to breed on the reserve. It may be that the optimum breeding habitats, probably on the inland boundary of the reserve, have not been sufficiently well covered because of difficulty of access to observers.

SEDGE WARBLER

PM Indications from the summer of 1983 that this species might colonise the developing scrub layer in the nature trail have not been realised. A single bird was there on 6 May 83, but there were no further records in this, or in the following year.

BLACKCAP

WV PM A wintering male was present in the power station gardens on 23rd and 29th January 83. In 1984, a blackcap was in the scrub bordering the railway line on 26 May, and three were together in the nature trail on 30 August.



WHITETHROAT

SV B Two pairs of whitethroat established territory in the nature trail in 1983, the earliest spring record being 17 April. By 11 June, one pair was feeding young, and on 10 July, there were at least five birds in the area, one of them an adult carrying food. The countrywide decline in whitethroat numbers in 1984 was reflected in the Connahs Quay records. The only April record was of one on 29th. By 10 May, two males were singing on territory in the nature trail, but apparently did not become paired. It is thought that the later returning females succumbed to bad weather which hit the Mediterranean after the males had passed through. Subsequently there were two June sightings of individuals, with one in each of July and August.

- LESSER WHITETHROAT R One record of a single on 17 August 83 is average for the reserve, as this is a warbler which has always been a sporadic visitor here. However, in 1984, a year in which lesser whitethroats did well generally, one, possibly two birds, were present between 1 June and 6 August.
- WILLOW WARBLER PM Most records are of birds singing in May as they move on to breeding areas, and both years show an increase over the previous three years. First recorded 16 and 18 April respectively, there were eight birds in different localities on 27 April 83.
- CHIFFCHAFF PM Few, and only spring passage birds in these two years, the individual on 18 April 83 being the sole record for that year. One on 28 March 84, was followed by 4 on 15 April and a last one on 20 April.
- GOLDCREST S PM Rare on the reserve. One in the Rockcliffe woodland on 20 March 83. In 1984, two were noted in the scrub in the nature trail on 14 April, a day on which there was a fall of goldcrests on the Dee shoreline.
- DUNNOCK R Almost certainly a breeding bird on the reserve, yet the retiring habits of this species in the breeding season leads to few logbook entries during the summer months. At least three pairs were in the Rockcliffe area on 6 April 83, and a pair were in wing flicking display in the shrubs of the power station entrance in spring 1984.
- MEADOW PIPIT PM WV After the decline in numbers recorded in 1981 and 1982, there has been a notable increase, with a strongly marked passage throughout April, peaking at 53 on 6 April 83 and 100 on 4 April 84. A bird in song flight over the saltmarsh on 2 July 83, is an unusual record.
- TREE PIPIT PM A species new to the reserve list, with a single in the willow and birch screen between the hides for two days from 23 April 83.
- ROCK PIPIT WV A pipit whose presence on the reserve coincides with windy and wet weather. 1983, 2 on 6 January, one on 1 February, and 2 on 20 November. 1984 had one on 20 February and 2 on 19 November.
- PIED/WHITE WAGTAIL PM R A noticeable movement of pied wagtails occurred from 5 April 83, with 12 birds, continuing through the month to peak at 22 on 7 May. In contrast, the same months of 1984 had but five records, and the only group was of 14 on 8 April. After a lapse of records in late May and June, sightings become frequent as adults and young birds take insects from the grazing fields and pool margins, but again 1984 indicated a poor year.
- PM The white wagtail stages on the reserve mainly on its spring journey and indeed there were no autumn records in these two years. Again 1983 was a good year. From the first bird through on 5 April to the end of May, there are twenty-nine records. The peak was on the evening of 18 April, when there were 22 white wagtails with 11 pied and 8 yellow, gathering to roost. There is a stark contrast in 1984, which had only one day, 20 April, when this species was present: 2 on 20 April with 30 meadow pipits.

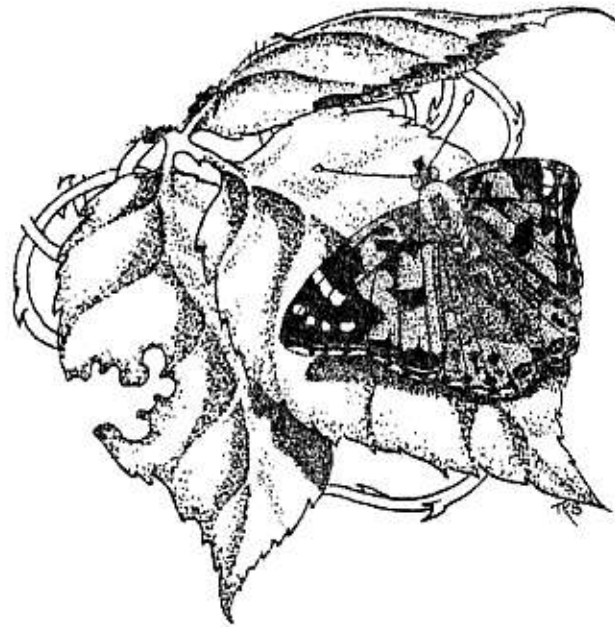
- GREY WAGTAIL S Irregular in its occurrence at Connahs Quay, this wagtail is most likely to be seen from September to April, moving to the milder coastal areas in winter and returning to the hill streams to breed. More sightings in these years than any previously reported: in 1983, as well as 3 singles, there were 4 with 23 yellow wagtails on 14 May, 3 on 9 September and 2 on 28 December. 1984 has five records of singles only.
- YELLOW WAGTAIL SV B Reaches the reserve in the third week of April. There was an excellent passage in 1983 with 26 on 27 April, 14 with 22 pied wagtails on 7 May and 23 on 14 May, and a continuous presence of smaller numbers. One pair, possibly two, bred with two young on the wing by mid-June. During the period of spring passage in 1984, there was only 23 April which had more than a pair recorded, and on this morning, 17 were avidly taking insects almost from under the hooves of the grazing cattle. One, possibly two pairs, remained to breed. Five young in one nest were reduced to two by the time of fledging at the end of May.
- GREAT GREY SHRIKE PM A rare visitor to the reserve and recorded only once in these two years on 16 August 84.
- STARLING PM WV Present throughout the year, though with dramatic fluctuations in numbers. In each year there have been the customary flocks of between 100 and 1000 young birds feeding on the upper saltmarsh from late June into August. Larger flocks occasionally occur over the winter months but there have never before been numbers such as on 28 October 84 when an estimated 20 to 30 thousand streamed over the revetment, with several thousand dropping down on to the reserve.
- GREENFINCH WV R Recorded irregularly and usually few in number, one to four birds together. However 20 were with 20 chaffinch and 70 brambling in the nature trail on 4 December 83.
- GOLDFINCH WV R Most numerous in the late months of the year, with 1983 especially good for colourful charms of goldfinch such as the 35 on 25 October. The thistles of the west field were the attraction in this year, but in December 84, the seeding silver birches attracted up to 21 to the nature trail.
- SISKIN S Uncommon on the reserve. Only one individual was recorded in this period, on 6 April 83.
- LINNET WV R B Linnets are present in varying numbers throughout the year. Flocks of up to 100 birds forage for saltmarsh seeds over the winter months. The winter peak was 180 in January 83. Young birds were on the reserve in both years, and on 17 June 83, an adult male was with two young. In 1984, numbers quickly built up after the end of the breeding season, with 200 on 29 July.
- TWITE WV PM January 83 saw small numbers of twite on the reserve, and on 25th a flock 50 strong was commuting between saltmarsh and the elders along the marsh road. Twenty with linnets on the cultivated land by the gatehouse on 20 March 83. Records are scant over the 1983/84 winter but 50 were brought close to the west hide by the high tide on 23 November 84.

- REDPOLL V New to the reserve's list of species when one turned up in the hedgerow near to the power station entrance on 18 April 83 and was seen again in the nature trail birches on 20 April.
- BULLFINCH R Local to the wooded area at Rockcliffe, though its shy behaviour, and the restricted access to this area mean that it is probably under-recorded with only 4 singles and one pair shown in the logbooks for the two years.
- CHAFFINCH WV Most numerous from November through the winter months. The flock which built up at the end of 1982 continued in 1983 with 300 on 20 January, finding the low lying area fronting the Field Study Centre rich for feeding. At the end of 1983, a flock of up to 200 was present in the same area, dwindling by the end of January 1984. The late months of 1984 have seen surprisingly low numbers of chaffinch, individuals loosely associating with reed bunting and yellowhammer.
- BRAMBLING WV This is an irruptive finch, following the fortunes of beechmast, and accordingly the reserve has a pattern of good and bad brambling years. The 1982/83 winter and 1984/85 had none at all, whilst the intervening winter had several hundred from November 83 right through to March 84. Along with the chaffinch, brambling foraged the marsh by the Study Centre, using the tree screen for resting and as a lookout for predators, but the highest count was 1000 on the ash pool road on 25 January 84.
- CORN BUNTING S Not common on the reserve, though this species has a small stronghold in the Shotwick fields which probably accounts for the few that are recorded. At the end of April 83, a bird was in song near the fly ash lagoon over a period of a few days, but had moved away by early May. One recorded in December 83, and 2 in January 84 are the only other entries.
- YELLOWHAMMER WV December and January are yellowhammer months on the reserve, with up to a dozen birds associating with reed buntings. Particularly attracted to the willows round the east hide when grain is put out as feed.
- REED BUNTING WV R Most records fall between September and April. Although not numerous over the 1983/84 winter, there have been groups of 20 birds together feeding on spartina in November and December 84, numbers which have not been seen on the reserve since the last two months of 1980.
- SNOW BUNTING V A single snow bunting was with 1000 brambling on the fly ash road on 25 January 84, and is the second record for the reserve.
- HOUSE SPARROW R A rare sight on the reserve! Only in the area of dwellings along the inland boundary is this species to be found.
- TREE SPARROW WV Communal feeding flocks gather in late winter on the cultivated ground by the power station entrance, where the thick hedgerow provides a safe roost and shelter. It seems that sufficient food is available in the breeding areas during the onset of winter for it is not until January that the tree sparrow appears. Up to 40 in January 83, fewer in 1984. Occasionally roving groups pass through in autumn and 1983 was such a year with 20 at Rockcliffe on 17 September.

Butterflies

The butterfly survey, which began with a pilot scheme in 1981, and continued in 1982, was undertaken again in 1983. As before, the transect walk through the nature trail was made weekly during the optimum time for butterfly flight. The results of the survey are summarised in the table overleaf. The total numbers from 1982 are given alongside those from 1983 for comparison. Most species held their own or increased in number, with the exception of some migrant species. The small skipper shows a dramatic change in status from 16 to 126 individuals, but further monitoring would be required to determine which year was the exception.

1983 was a good year for butterflies on the reserve; only the Vanessids (Red Admiral, Painted Lady) were down in numbers compared with 1982. These are migrant species from Europe and it may be that they had a poor breeding season on the continent, or that weather conditions in July and August were unfavourable for migration northward. Surprisingly, then, 1983 was a Clouded Yellow year. These beautiful migrant butterflies appear in Britain in reasonable numbers every 10 years or so, and this was one such year. They were reported on the reserve throughout the first six weeks in August. On 6 August, 5 were recorded, with one pair mating, although it is unlikely that any offspring would survive even a mild British winter. Two reports of Ringlets, a Brimstone on 22 July and a Pearl Bordered Fritillary in June brought the number of species seen on the reserve to twenty-two. Perhaps the Ringlet occurs on the reserve more commonly than these records suggest, for it is easily overlooked as a Meadow Brown.



1984 was a mixed year for butterflies. Exceptional frosts in May probably wreaked havoc with early broods, and the transect counts made in the first weeks of the butterfly season reveal a drop in numbers compared with the same weeks of the previous year. Unfortunately transect counts were made for only two weeks of the prime butterfly period, from July on, so that no direct comparison can be made for the following weeks. Logbook entries, however, provide evidence that the long dry summer which followed the harsh spring provided ideal conditions for butterflies. Many species seemed to regain their former numbers and the Small Heath, in particular, appeared to have increased.

1984 lacked the exceptional species of the previous year such as Brimstone and Clouded Yellow, though there were several records of Grizzled Skipper, a butterfly not previously recorded on the reserve. There is some question as to the identity of these, however, as the records do not coincide with the main period of flight for Grizzled Skipper. Several day flying moths bear a superficial resemblance to this butterfly, the Mother Shipton especially, which could well occur on the reserve, being very similar.

Although the occasional visitors, which increase the reserve's list of butterfly species, such as 1983's Brimstone and Clouded Yellow, are interesting, there is no doubt that the reserve's main importance for butterflies is to its resident species, most of which feed on grasses and low vegetation such as plantains and trefoil. The reserve has good numbers of the three common species of Skipper, and of the Common Blue. All these species have suffered from the conversion of meadow to agricultural land, and from the use of selective herbicides which have destroyed their food-plants. Areas like the reserve, where a full variety of natural vegetation flourishes are therefore most important.

30

SPECIES	APRIL					MAY					JUNE					JULY					AUGUST				SEPTEMBER				TOTAL	
	*1	*2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	1983	1982		
Speckled Wood							1								1	1							1	2			6	1		
Wall Brown										3	17	17	3							5	35	30	12					122	57	
Grayling															2	25	36	38	22	4	2							129	139	
Meadow Brown															2	15	66	73	48	37	41	9	1					292	232	
Gatekeeper																5	4	3		2								14	3	
Small Heath												1	2		1	1			1									6	3	
Red Admiral																												-	16	
Painted Lady																1		1										2	39	
Small Tortoiseshell			10	10	7	7	4	4	5	1					7	32	18	31	2	2		3					143	251		
Peacock			2	3	1	1													9	9	7						32	104		
Comma																												-	1	
Common Blue							1			1	5	24		33	30	8		10	29	83	62	61	10	1	4	1		363	275	
Small Copper										1									1	1	2	1			1			7	9	
Large White							1		2	9	4	5		10	15	3	3	10	11	4	9	7	19	2	1			115	67	
Small White										1	2	2	3		3	2		9	14	10	8	5			2			61	48	
Green Veined White							2				1	1	3		2	1	1	8	20	12	2		1					54	61	
Orange Tip											1																	1	-	
Clouded Yellow																				3	2	2						7	-	
Dingy Skipper							2		3	8	6	1																20	8	
Small Skipper															2	42	48	14	14	6								126	16	
Large Skipper											4	7		8	27	6	1											53	190	

* no count taken

Moths

1983 has few records of moths, only the Five-spot Burnet, Cinnabar, and Latticed Heath being reported. It is not surprising that records are scarce: most moths are active at night, and their diversity is such that they present problems of identification.

In 1984, for the first time, moth trapping was undertaken on the reserve during one evening in September. Moths were caught at lights, identified and then released. Nineteen species of moth were identified of which the Copper Underwing was probably the most noteworthy. It is difficult to say from the results of moth trapping that all the species caught occur naturally on the reserve, as moths may be attracted by the lights from some distance. However all the moths trapped do have food plants growing on the reserve, and could therefore breed within its area. A list of the species identified in 1984 along with their foodplants is given below. It is hoped to gain a more complete picture of the moths on the reserve with further light trappings arranged for 1985.

Species	Food Plants
Setaceous Hebrew Character	Dock, Chickweed, Groundsel
Lesser Yellow Underwing	Grasses
Large Yellow Underwing	Grasses
Square Spot Rustic	Many low growing plants
Dotted Rustic	Dock, Dandelion, Groundsel
Rosy Rustic	Dock, Plantain
Flounced Rustic	Grasses, Roots
Small Square Spot	Dandelion, Dock, Grasses
Shuttle-Shaped Dart	Dandelion, Grasses
Copper Underwing	Oak, Sallow, Birch
Angle Shades	Groundsel, Dock
Silver Y	Thistle, Burdock
Gold Spot	Sedge, Coarse grasses
Common Carpet	Bedstraw
Common Marbled Carpet	Sallow, Birch, Hawthorn
Treble Bar	St. John's Wort
The Mouse Moth	Sallow, Hawthorn
Frosted Orange	Thistle, Burdock
Feathered Gothic	Grasses
Six-spot Burnet	Trefoil, Clover, Vetch
Cinnabar	Ragwort

Classified list of plants

In 1984 a small group of members began a survey of the plants on the reserve, and the list of the reserve's flora which follows, reflects their findings. Because the survey began towards the end of spring, some early plants may have gone unrecorded in 1984; any such plants will be added to the list of species during 1985 when work on the flora of the reserve will continue.

In the 10 years which have elapsed since the last full survey of plants was undertaken there have been significant changes. Several plants have increased, perhaps most noticeably the Red Bartsia which has spread across the reserve. Others which have done well are Common Centaury and Yellow Toadflax whose pale lemon spikes have not only spread, but colonised new areas. The Common Spotted Orchid is no longer confined to the willowscrub near the reserve entrance, but flowers in the nature trail and even down the marsh road.

A number of plants have been found which are new to the reserve, among them Marsh Woundwort, Hemp Agrimony and Seaside Crowfoot. However not all is on the credit side. Some species previously listed have not been found, and it is significant that many of these were plants of shadier areas or woodland edge, plants such as the Foxglove, which found a niche in the region of Rockcliffe. Sadly this area has become badly degraded through constant pressure from grazing animals: the vegetation has been browsed and the land suffered from trampling and over-enrichment.

More detailed changes in the status of the reserve's plants will be apparent if the list of flora which follows is compared with lists published in previous reports, having regard to the areas of the reserve noted on the key map.

Key to Reserve Area Map:

A2 A4 - the plant occurs in sections A2 and A4

A2-A4 - the plant occurs in sections A2, A3 and A4

PTERIDOPHYTA - FILICALES

Male fern

Dryopteris filix-mas A2

Bracken

Pteridium aquilinum A3

SPERMATOPHYTA - ANGIOSPERMAE

Meadow buttercup

Ranunculus acris A2-A5

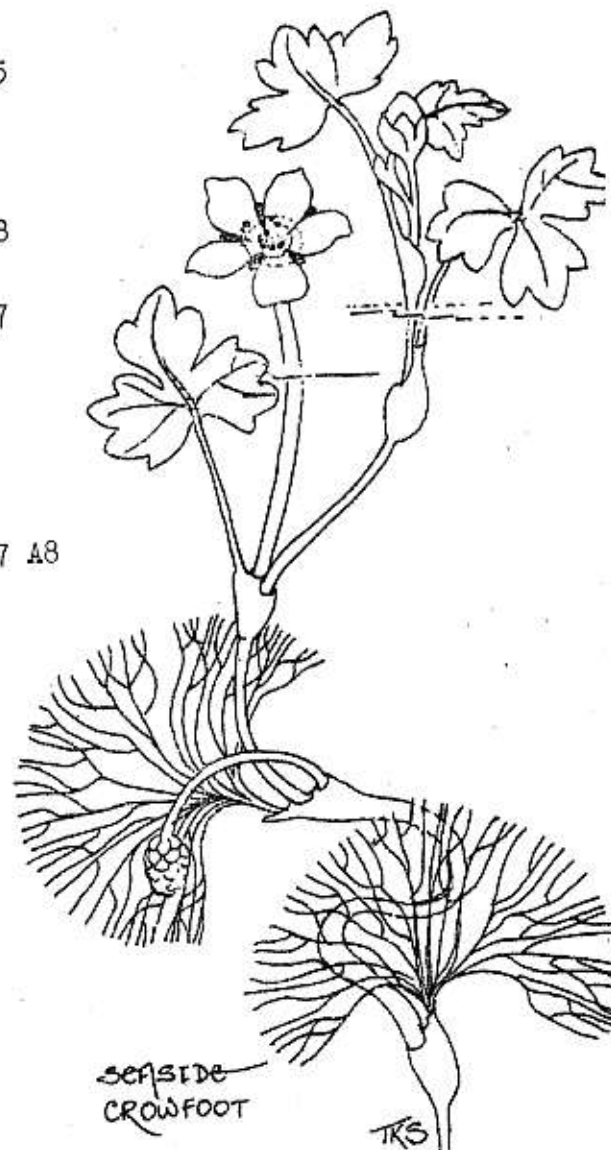
Lesser celandine

Ranunculus ficaria A3

Creeping buttercup

Ranunculus repens A1-A4 A8

Seaside crowfoot <i>Ranunculus baudotii.</i>	A8
Field poppy <i>Papaver rhoeas</i>	A1 A2
Shepherd's purse <i>Capsella bursa-pastoris</i>	A1 A3
Common scurvy-grass <i>Cochlearia officinalis</i>	A7
Marsh yellowcress <i>Rorripa palustris</i>	A1 A8
Hedge mustard <i>Sisymbrium officinale</i>	A1 A2 A7
Weld <i>Reseda luteola</i>	A1
Perforate St. John's wort <i>Hypericum perforatum</i>	A3
Bladder campion <i>Silene vulgaris</i>	A5
Red campion <i>Silene dioica</i>	A2
White campion <i>Silene alba</i>	A2 A4 A5
Red x white hybrid <i>S.dioica x S.alba</i>	A4 A5
Common mouse-ear chickweed <i>Cerastium fontanum</i>	A1-A5 A8
Chickweed <i>Stellaria media</i>	A1 A3 A7
Lesser stitchwort <i>Stellaria graminea</i>	A3
Lesser sea-spurrey <i>Spergularia marina</i>	A6 A8
Good King Henry <i>Chenopodium Bonus-Henricus</i>	A1 A2 A7 A8
Fat hen <i>Chenopodium album</i>	A7
Sea beet <i>Beta vulgaris</i>	A7
Common orache <i>Atriplex patula</i>	A6-A8
Grass leaved orache <i>Atriplex littoralis</i>	A7 A8
Hastate orache <i>Atriplex hastata</i>	A7 A8
Babington's orache <i>Atriplex glabriuscula</i>	A7 A8
Sea purslane <i>Halimione portulacoides</i>	A8



Annual sea blite Suaeda maritima	A6 A7
Glasswort Salicornia europaea	A6 A7
Dove's-foot cranesbill Geranium molle	A2 A4
Cut-leaved cranesbill Geranium dissectum	A8
Herb robert Geranium robertianum	A4
Broom Sarothamnus scoparius	A2
Lucerne Medicago sativa	A2 A4-A6
Black medick Medicago lupulina	A3-A6
Common melilot Melilotus officinalis	A5
White melilot Melilotus alba	A1 A4-A6
Hop trefoil Trifolium campestre	A1 A2 A5
White clover Trifolium repens	A1-A6 A8
Hare's foot Trifolium arvense	A2 A4 A5
Red clover Trifolium pratense	A1-A6
Lesser yellow trefoil Trifolium dubium	A1-A6 A8
Zigzag clover Trifolium medium	A1
Birdsfoot trefoil Lotus corniculatus	A1-A5 A7
Hairy tare Vicia hirsuta	A4 A5 A8
Tufted vetch Vicia cracca	A2 A5
Common vetch Vicia sativa	A1-A6
Meadow vetchling Lathyrus pratensis	A2 A3 A5
Bramble Rubus fruticosus	A1-A5 A7
Silverweed Potentilla anserina	A3 A5 A6



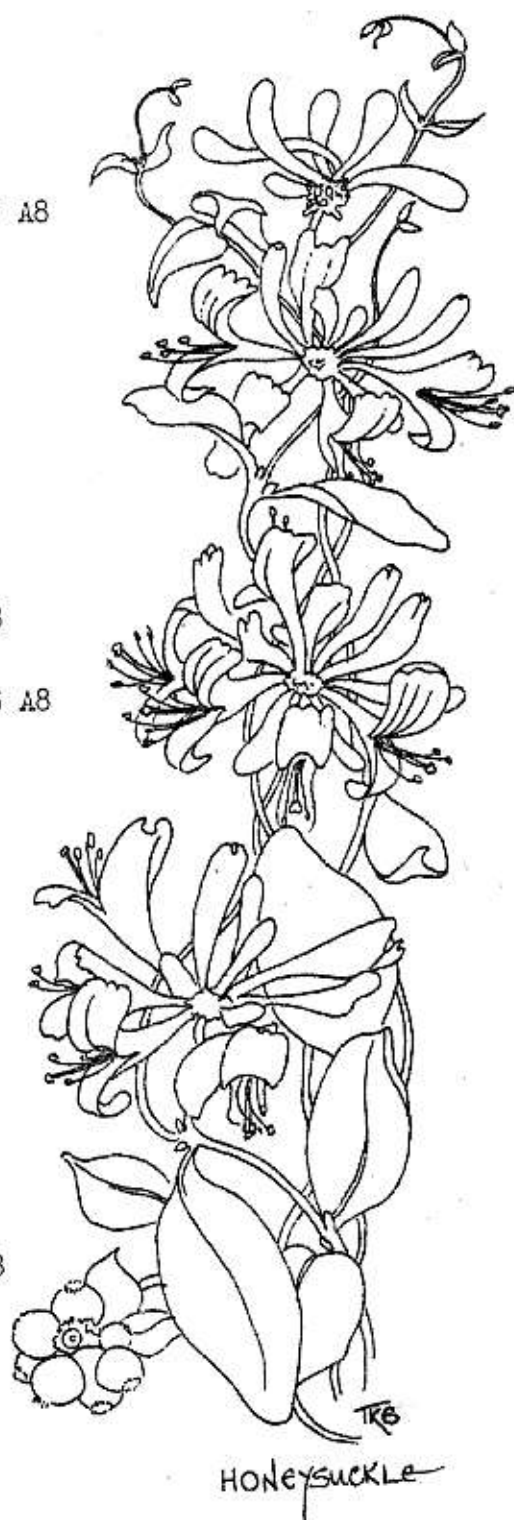
CUT-LEAVED
CRANESBILL

Creeping cinquefoil <i>Potentilla reptans</i>	A1 A3-A5
Dog rose <i>Rosa canina</i>	A1-A5
Hawthorn <i>Crataegus monogyna</i>	A3 A5 A7
Great hairy willow-herb <i>Epilobium hirsutum</i>	A1 A3 A5
Rosebay willow-herb <i>Epilobium angustifolium</i>	A2-A7
Mares tail <i>Hippuris vulgaris</i>	A2
Ivy <i>Hedera helix</i>	A3
Cow parsley <i>Anthriscus sylvestris</i>	A5
Upright hedge parsley <i>Torilis japonica</i>	A3-A5
Wild celery <i>Apium graveolens</i>	A6
Hogweed <i>Heracleum sphondylium</i>	A1-A5 A7
Wild carrot <i>Daucus carota</i>	A1-A8
Knotgrass <i>Polygonum aviculare</i>	A1 A3 A7 A8
Persicaria <i>Polygonum persicaria</i>	A1
Curled dock <i>Rumex crispus</i>	A1-A3 A6-A8
Broad-leaved dock <i>Rumex obtusifolius</i>	A1
Stinging nettle <i>Urtica dioica</i>	A1-A5 A7 A8
Common Centaury <i>Centaurium erythraea</i>	A3-A6
Lesser bindweed <i>Convolvulus arvensis</i>	A5
Great bindweed <i>Calystegia sylvatica</i>	A1 A5
Bittersweet (Woody nightshade) <i>Solanum dulcamara</i>	A1 A2 A4 A7
Mullein <i>Verbascum thapsus</i>	A4
Common toadflax <i>Linaria vulgaris</i>	A1-A5 A7



LESSER
BINDWEED

Red bartsia Odontites verna	A1-A3 A5 A6 A8
Self-heal Prunella vulgaris	A5
Hedge woundwort Stachys sylvatica	A4
Marsh woundwort Stachys palustris	A5
Greater plantain Plantago major	A1-A4
Sea plantain Plantago maritima	A6 A7
Ribwort plantain Plantago lanceolata	A1-A5
Cleavers Galium aparine	A1-A3 A5 A7 A8
Elder Sambucus nigra	A1-A3 A5
Honeysuckle Lonicera peridymenum	A4
Teasel Dipsacus fullonum	A1
Ragwort Senecio jacobaea	A1-A8
Oxford ragwort Senecio squalidus	A1 A2 A4-A8
Ox-eye daisy Leucanthemum vulgare	A1 A2 A4 A5 A8
Coltsfoot Tussilago farfara	A1-A8
Winter heliotrope Petasites fragrans	A3
Sea aster Aster tripolium	A5-A8
Daisy Bellis perennis	A2-A5
Yarrow Achillea millefolium	A1-A5 A7
Hemp agrimony Eupatorium cannabinum	A5
Scentless mayweed Tripleurospermum inodorum	A1 A3 A6-A8
Scented mayweed Matricaria recutita	A1
Tansy Chrysanthemum vulgare	A2-A5



Mugwort	<i>Artemisia vulgaris</i>	A1-A7
Burdock	<i>Arctium pubens</i>	A1-A5
Spear thistle	<i>Cirsium vulgare</i>	A1-A5 A8
Creeping thistle	<i>Cirsium arvense</i>	A1-A3 A5-A8
Scotch thistle	<i>Onopordum acanthium</i>	A1 A2 A5
Black knapweed	<i>Centaurea nigra</i>	A1-A5
Nipplewort	<i>Lapsana communis</i>	A2 A3 A5
Catsear	<i>Hypochaeris radicata</i>	A1-A5
Goatsbeard	<i>Tragopogon pratensis</i>	A2 A4 A5
Perennial sow-thistle	<i>Sonchus arvensis</i>	A1 A2 A4 A6
Smooth sow-thistle	<i>Sonchus oleraceus</i>	A1-A4
Prickly sow-thistle	<i>Sonchus asper</i>	A1-A5
Smooth hawksbeard	<i>Crepis capillaris</i>	A1 A2 A4-A6
Common dandelion	<i>Taraxacum officinale</i>	A1-A7
Common spotted orchid	<i>Dactylorhiza fuchsii</i>	A2-A5
Sea clubrush	<i>Scirpus maritimus</i>	A6
Glaucous clubrush	<i>Scirpus tabernaemontani</i>	A8
Spartina	<i>Spartina anglica</i>	A5-A8
Reed	<i>Phragmites communis</i>	A2 A5 A6
Marram	<i>Ammophila arenaria</i>	A6 A7
Common saltmarsh grass	<i>Puccinellia maritima</i>	A5-A8
Red fescue	<i>Festuca rubra</i>	A5-A8
Sea couch grass	<i>Agropyron pungens</i>	A6 A7



COMMON
SPOTTED ORCHID

Fungi

The following fungi were identified during a 'fungus foray' on the reserve on 11 October 84:

AGARICALES

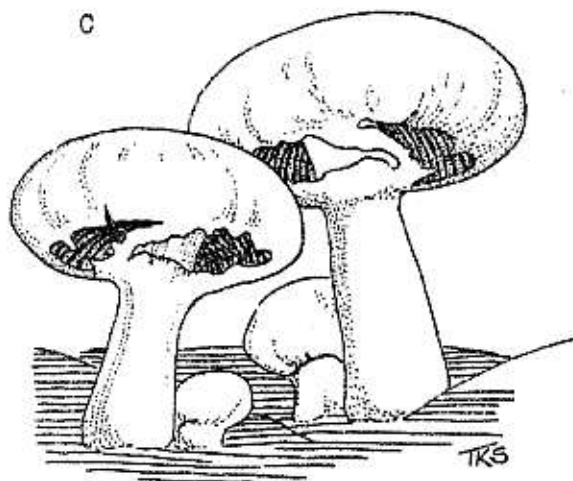
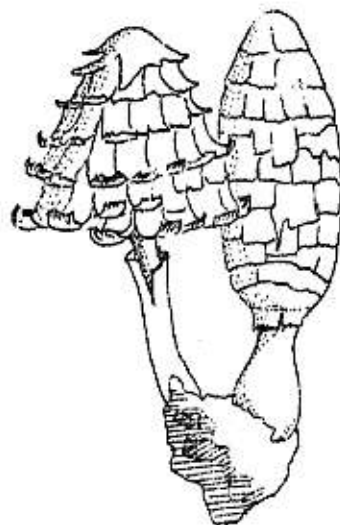
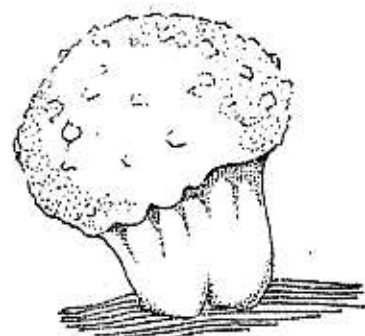
		<u>Location</u>
Agaricus campestris	Field mushroom	A
Collybia obscura	-	B
Coprinus atramentarius	Common Ink Cap	B
Coprinus comatus	Shaggy Ink Cap/ Lawyer's Wig	A
Gerronema fibula	Carpet-pin mycena	C
Hebeloma crustuliniform	Poison Pie	D
Hygrocybe conica	Conical wax Cap	E
Hygrophorus niveus	Snowy wax Cap	F
Lycoperdon perlatum	Common Puff-Ball	A
Lactarius torminosus	Woolly Milk-Cap	G
Paxillus involutus	Brown Roll Rim	H
Stropharia semiglobata	Dung Roundhead	I

ASCOMYCETES

Neottiella rutilans	-	C
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Key to location:

- A - edges of paths
- B - tufted amongst grasses
- C - through moss beneath pylons
- D - under trees/in open grass
- E - amongst grasses
- F - on short turf
- G - grasses under trees
- H - under trees
- I - on dung



Illustrated are: Common Puff-Ball, Shaggy Ink Cap and Field Mushroom