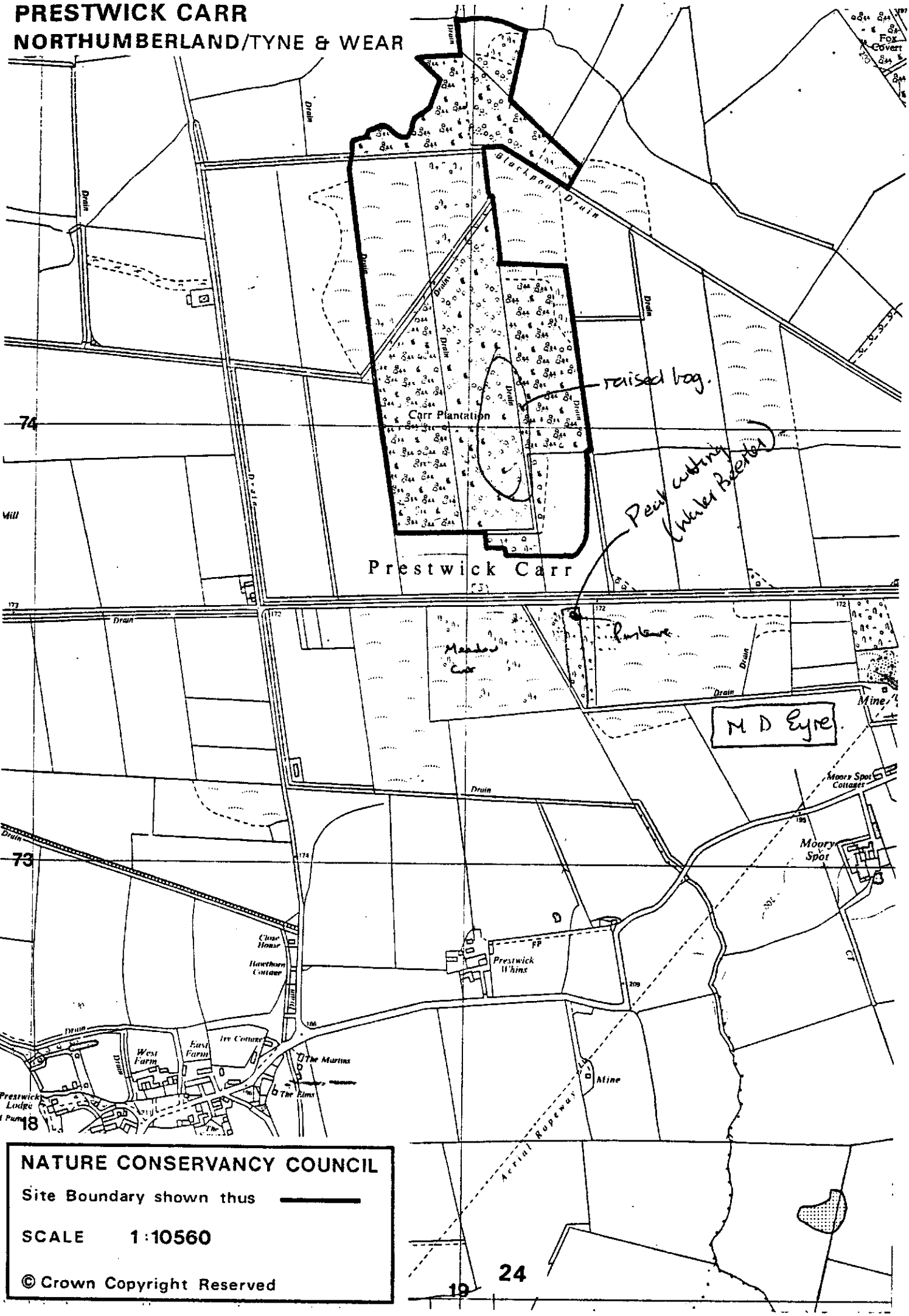
PRESTWICK CARR

NORTHUMBERLAND/TYNE & WEAR



NATURE CONSERVANCY COUNCIL

Site Boundary shown thus ——

SCALE 1:10560

INVERTEBRATE SITE REGISTER MASTER FORM

Site number 70/6

Name(s)

RYTON WILLOWS

County(s)

Tyne and Wear

Grid. Ref.

NZ1564

Grade

B

Status

pSSSI
Public Authority

Site description - Habitat

Complex of deciduous woodlands on steep slopes below Ryton Village leading down to three ponds either side of the railway line. The ponds are spring fed and have extensive marginal swamp vegetation. The woods are probably secondary and are Sycamore and Beech dominated. The Willows is an old sandy Heugh which has stopped being seasonally flooded since the river course has been dredged and now supports gorse scrub and poor acid grassland with large areas of Rosebay Willowherb.

Invertebrate Interest - Coverage

Ponds support a good aquatic fauna with the waterbeetles being of particular note include Ilybius subaeneus. Waterbugs include the locally scarce Water Measurer Hydrometra stagnorum and the Pond Spider is rumoured to be present. Reasonable dragonfly fauna with eight species recorded.

Comments - Conservation

The two largest ponds suffer from bank erosion by uncontrolled angling, mostly by local kids. The smaller pond is on Church Commission land, the rest of the site is owned by Gateshead MBC and the two larger ponds and the wooded slope are managed as a nature reserve. Proposed LNR.

Red Data Book and Notable species recorded for RYTON WILLOWS

Na

Dorytomus tremulae	COL:Curculionidae	1980	Eyre, M D

Notable/Nb

Bembidion testaceum	*COL:Carabidae*	*1855*	*Bold(1858)*
Ilybius guttiger	COL:Dytiscidae	1970-	Eyre, M D
Ilybius subaeneus Erichson	COL:Dytiscidae	1970-	Eyre, M D
Dolichopus latelimbatus	DIP:Dolichopodidae	1983	Ball, Dr S G
Hydrophorus balticus	DIP:Dolichopodidae	1984	Ball, Dr S G
Ceratinopsis stativa	ARA:Linyphiidae	1985	Rushton, Dr S J

Nr

Hesperocorixa castanea	HEM:Corixidae	1970	Eales, H
Hydrometra stagnorum	HEM:Hydrometridae	1978	Eyre, M D
Sisyra fuscata	NEU:Sisyridae	1985	Eyre, M D
Acilius sulcatus (L)	COL:Dytiscidae	1970	Eales, H
Dytiscus semisulcatus Muller	COL:Dytiscidae	1970-	Eyre, M D
Hyphydrus ovatus (L)	COL:Dytiscidae	1985	Fraser, Alex
Porhydrus lineatus (F)	COL:Dytiscidae	1985	Fraser, Alex
Stenus latifrons Erichson	COL:Staphylinidae	1981	Reid, C
Nonagria typhae	LEP:Noctuidae	1966	Eales, H
2369,Bulrush Wainscot			
Pyrrhia umbra	*LEP:Noctuidae*	*1931*	*Johnson(1931)*
2399,Bordered Sallow			
Chalcosyrphus nemorum	DIP:Syrphidae	1983	Ball, Dr S G
Habitat indicator of Deciduous & mixed wood (3)			
Tetanocera arrogans	DIP:Sciomyzidae	1984	Ball, Dr S G
Andrena pubescens	HYM:Andrenidae	1980	Sheppard, Dr D A

Local

Nepa cinerea	HEM:Nepidae	1984	Ball, Dr S G
Water Scorpion			
Amara communis	COL:Carabidae	1985	Eyre, M D
Amara tibialis	COL:Carabidae	1985	Eyre, M D
Laccobius biguttatus Gerhardt	COL:Hydrophilidae	1985	Fraser, Alex
Laccophilus minutus (L)	COL:Dytiscidae	1985	Fraser, Alex
Noterus clavicornis (Degeer)	COL:Noteridae	1985	Fraser, Alex
Ochthebius dilitatus Stephens	COL:Hydraenidae	1970-	Eyre, M D
Rhantus exsoletus (Forster)	COL:Dytiscidae	1985	Fraser, Alex
Stenus cicindeloides (Schaller)	COL:Staphylinidae	1981	Reid, C
Stenus picipennis Erichson	COL:Staphylinidae	1981	Reid, C
Phryganea grandis L	TRI:Phryganeidae	1970-	Wallace, Dr.I
Mormo maura	LEP:Noctuidae	1961	Philipson, J W
2300,Old Lady			
Conops flavipes L	DIP:Conopidae	1984	Ball, Dr S G
Neoascia meticulosa (Scopoli)	DIP:Syrphidae	1984	Ball, Dr S G
Habitat indicator of Reedbed, Fen, Carr or grazing marsh (2)			

34 species listed
Invertebrate Index = 490

NATURE CONSERVANCY COUNCIL

INVERTEBRATE

SITE

REGISTER

SITE NAME	GRID REFERENCE
RYTON WILLOWS	NZ 15 64

DATE OR PERIOD OF VISITS	MODERN COUNTY
1977 – 1984	TYNE and WEAR

RECORDER	ALTITUDE M.
S G BALL	

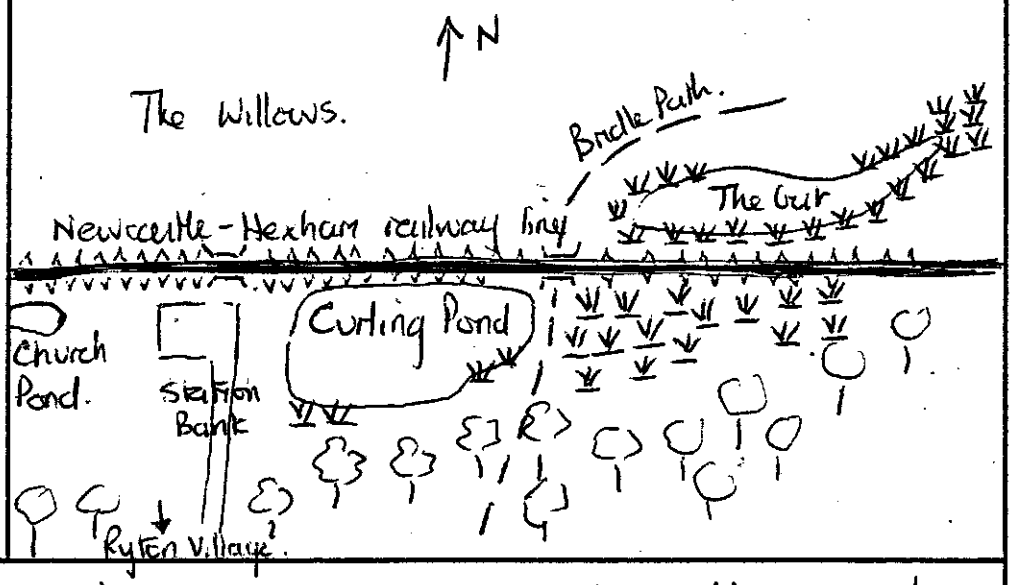
Site Status

National Nat. Res.	
RSPB Reserve	
County Trust Res.	
SSSI	P
Local Authority	/
Common Land	
Forestry Commission	
Min. of Defence	
National Trust	
Private Owner	
Other, please state	

Confidentiality

At discretion of NCC	
Consult recorder	

Sketch Map (showing main areas of invertebrate interest)



Site Description (habitats of interest)

Two borrow ponds (Church Pond and Curling pond) and an old course of the river Tyne (Gut) with extensive marginal damp vegetation including Bur Reed, Typha and Eleocharis. Steep, Wooded bank above the site.

Main Invertebrate Interest

Long history of interest in the aquatic invertebrates and it is one of the best sites in Tyne and Wear for Water bugs and Water Beetles. 8 species of Dragonflies. Only recent locality – in north-east for Hydrometra stagnorum and reputed to have pond spider (only two other localities in north-east)

General Comments (Site importance, conservation problems etc)

The area is in the process of being scheduled as an SSSI for its botanic interest and may well become an LNR.

Main threat at the moment is from uncontrolled angling which is causing severe erosion and damage to marginal vegetation. There has been a request to the water authority to kill coarse fish with Rotenone and stock with trout.

(Please use back of sheet for further details – eg species lists, literature ref. etc)

Office use

NATURE CONSERVANCY COUNCIL

INVERTEBRATE

SITE

REGISTER

SITE NAME: Ryton Willows

GRID REFERENCE: N 2 1 5 8 6 4 9

DATE OR PERIOD OF VISITS:

MODERN COUNTY: Tyne & Wear

RECORDER:

ALTITUDE M.:

Site Status

National Nat. Res.	
RSPB Reserve	
County Trust Res.	
SSSI	
Local Authority	✓
Common Land	✓
Forestry Commission	
Min.of Defence	
National Trust	
Private Owner	
Other, please state	

Confidentiality

At discretion of NCC	✓
Consult recorder	

Sketch Map (showing main areas of invertebrate interest)

Site Description (habitats of interest)

Complex of deciduous woodland on steep slopes with ponds and marsh at base fed by spring-line. Large area of grassland merges into Gorse/Broom scrub bordering river Tyne. Woodland consists mainly of introduced species such as Sycamore and Beech, grassland is acidic and species poor but marsh and ponds are rich and diverse in species

Main Invertebrate Interest

General Comments (Site importance, conservation problems etc)

Owned by Gateshead M.B.C. and managed by Parks Services Dept.

Proposed S.S.S.I and L.N.R.

(Please use back of sheet for further details - eg species lists, literature ref. etc)

Office use

INVERTEBRATE SITE REGISTER
MASTER FORM

Site number 70/7

Name(s)

SHIBDON POND
BLAYDON POND

County(s)

Tyne and Wear

Grid. Ref.

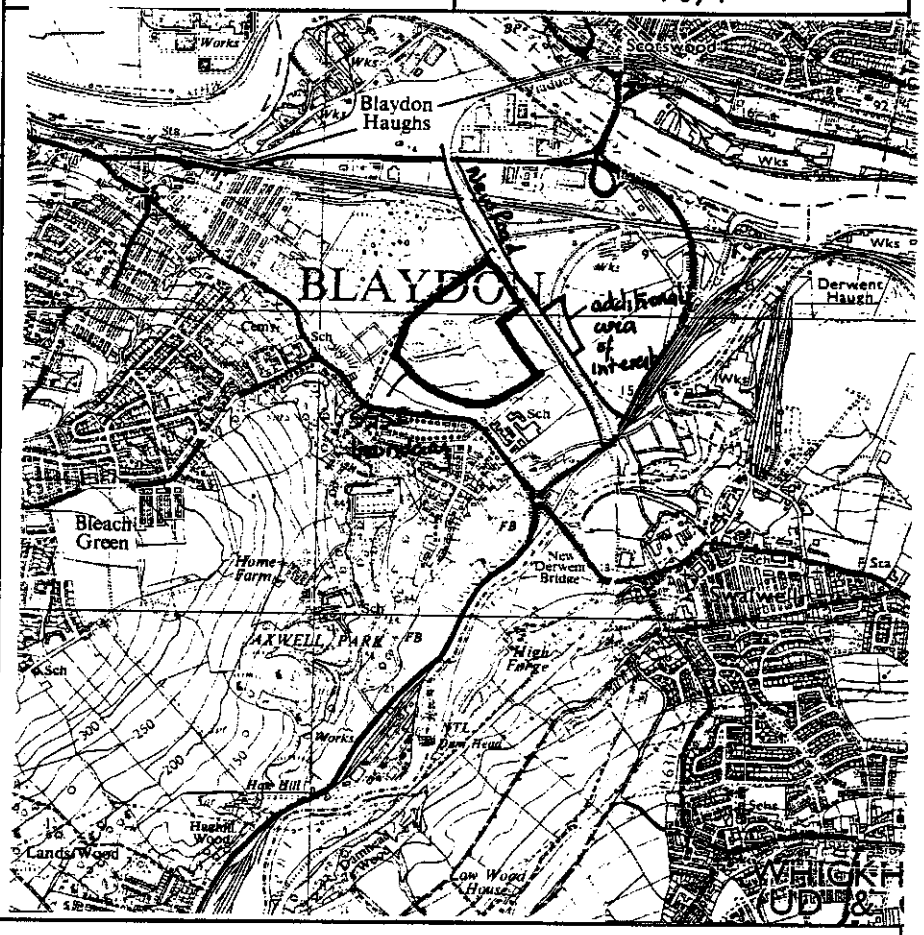
NZ1962

Grade

B

Status

SSSI
LNR
County trust reserve



Site description - Habitat

Subsidence pond surrounded by extensive marsh, damp species rich grassland and scrub. Pond is fed from springs emerging from old mine workings and is drained by a tidal and slightly brackish ditch which runs to the Tyne estuary nearby. Marsh dominated by extensive beds of Typha and Glyceria. Scrub is predominatly hawthorn with various planted species to augment old hedgerows. The fringing grasslands and wet pasture north of the old railway line (or the new road) are probably relicts of the Tyne flood plain.

Invertebrate Interest - Coverage

Excellent assembly of reedbed and wet meadow species including 8 RDB3 Diptera. On present knowledge this is the best wetland site in the North-east.

Comments - Conservation

Owned by Gateshead MBC and leased to DCCT. Gateshead have a wardening scheme and management team. The A69 western bypass will take a strip 50m wide off the northern edge of the reedbeds. Consideration should be given to including some of the wet meadow in the SSSI.

Red Data Book and Notable species recorded for SHIBDON POND

RDB3

Colobaea bifasciella	DIP:Sciomyzidae	1984	Ball, Dr S G
Lonchoptera nitidifrons	DIP:Lonchopteridae	1984	Ball, Dr S G
Orthonevra brevicornis	DIP:Syrphidae	1984	Ball, Dr S G
Phaonia atriceps	DIP:Muscidae	1984	Ball, Dr S G
Pherbellia griseola	DIP:Sciomyzidae	1984	Ball, Dr S G
Platycheirus perpallidus	DIP:Syrphidae	1984	Ball, Dr S G
Habitat indicator of Reedbed, Fen, Carr or grazing marsh (3)			
Sciomyza simplex	DIP:Sciomyzidae	1984	Ball, Dr S G
Stratiomys potamida	DIP:Stratiomyidae	1984	Ball, Dr S G

Na

Sesia bembeciformis	LEP:Sesiidae	1983	DCCT files
0371,Lunar Hornet Moth			

Notable/Nb

Apion cerdo	COL:Apionidae	1984	Luff, Dr M L
Enochrus coarctatus (Gredler)	COL:Hydrophilidae	1985	Fraser, Alex
New record for North-east			
Leptusa pulchella	COL:Staphylinidae	1983	Reid, C
Achalcus cinereus	DIP:Dolichopodidae	1984	Ball, Dr S G
Habitat indicator of Reedbed, Fen, Carr or grazing marsh			
Achalcus flavicollis	DIP:Dolichopodidae	1984	Ball, Dr S G
Habitat indicator of Reedbed, Fen, Carr or grazing marsh			
Anasimyia contracta Claussen & T	DIP:Syrphidae	1984	Ball, Dr S G
Argyra argentella	DIP:Dolichopodidae	1984	Ball, Dr S G
Argyra perplexa	DIP:Dolichopodidae	1984	Ball, Dr S G
Calliopum elisae	DIP:Lauxaniidae	1984	Ball, Dr S G
Elachiptera megaspis	DIP:Chloropidae	1984	Ball, Dr S G
Hilara griseifrons	DIP:Empididae	1984	Ball, Dr S G
Hydrophorus balticus	DIP:Dolichopodidae	1984	Ball, Dr S G
Hypophyllus crinipes	DIP:Dolichopodidae	1984	Ball, Dr S G
Lispe pygmaea	DIP:Muscidae	1984	Ball, Dr S G
Minettia fasciata	DIP:Lauxaniidae	1984	Ball, Dr S G
Nemotelus nigrinus	DIP:Stratiomyidae	1984	Ball, Dr S G
Oxycera trilineata	DIP:Stratiomyidae	1984	Ball, Dr S G
Pherbellia ventralis	DIP:Sciomyzidae	1984	Ball, Dr S G
Platypalpus leucocephalus	DIP:Empididae	1984	Ball, Dr S G
Pteromicra angustipennis	DIP:Sciomyzidae	1984	Ball, Dr S G
Rhamphomyia umbripennis	DIP:Empididae	1984	Ball, Dr S G
Scaptomyza flava	DIP:Drosophilidae	1976	Ball, Dr S G
Suillia affinis	DIP:Heleomyzidae	1984	Ball, Dr S G
Pitfalls			
Syntormon pumilus	DIP:Dolichopodidae	1984	Ball, Dr S G
Teuchophorus spinigerellus	DIP:Dolichopodidae	1984	Ball, Dr S G
Habitat indicator of Reedbed, Fen, Carr or grazing marsh			
Tomosvaryella palliditarsis (Col	DIP:Pipunculidae	1984	Ball, Dr S G

SHIBDON POND (Continued)

Nr

Dromius notatus	COL:Carabidae	1981	Reid, C
Graptodytes pictus (F)	COL:Dytiscidae	1985	Fraser, Alex
Pterostichus vernalis (Panzer)	COL:Carabidae	1985	Eyre, M D
Anasimyia lineata (F)	DIP:Syrphidae	1984	Ball, Dr S G
Calobata ephippium	DIP:Micropezidae	1984	Ball, Dr S G
Clinocera bipunctata	DIP:Empididae	1984	Ball, Dr S G
Elgiva cucularia	DIP:Sciomyzidae	1984	Ball, Dr S G
Helina maculipennis	DIP:Muscidae	1984	Ball, Dr S G
Hemerodromia raptoria	DIP:Empididae	1984	Ball, Dr S G
Limnophora maculosa	DIP:Muscidae	1984	Ball, Dr S G
Parahelophilus versicolor (F)	DIP:Syrphidae	1984	Ball, Dr S G
Tetanocera arrogans	DIP:Sciomyzidae	1984	Ball, Dr S G
Lasioglossum fulvicorne	HYM:Halictidae	1985	Bruce & Woodfall(1983)

Local

Aphrodes albiger (Germar)	HEM:Cicadellidae	1983	Port, Dr G R
Macrosteles septemnotatus (Falle	HEM:Cicadellidae	1984	Port, Dr G R
Muellerianella brevipennis (Bohe	HEM:Delphacidae	1984	Port, Dr G R
Paluda adumbrata (Sahlberg, C)	HEM:Cicadellidae	1984	Port, Dr G R
Paluda flaveola (Boheman)	HEM:Cicadellidae	1983	Port, Dr G R
Agonum obscurum (Herbst)	COL:Carabidae	1985	Eyre, M D
Agonum thoreyi DeJean	COL:Carabidae	1981	Reid, C
Amara tibialis	COL:Carabidae	1985	Eyre, M D
Bembidion obtusum Serville	COL:Carabidae	1985	Eyre, M D
Cantharis paludosa	COL:Cantharidae	1984	Luff, Dr M L
Cidnopus minutus (L)	COL:Elateridae	1985	Luff, Dr M L
Cyphon hilaris	COL:Scirtidae	1984	Luff, Dr M L
Dromius linearis (Oliver)	COL:Carabidae	1981	Reid, C
Dromius melanocephalus Dejean	COL:Carabidae	1981	Reid, C
Elaphrus cupreus Dufts.	COL:Carabidae	1984	Luff, Dr M L
Haliplus immaculatus Gerhardt	COL:Haliplidae	1985	Eyre, M D
Hippuriphila modeeri	COL:Chrysomelidae	1984	Luff, Dr M L
Noterus clavicornis (Degeer)	COL:Noteridae	1985	Eyre, M D
Notiophilus substriatus Waterh.	COL:Carabidae	1985	Eyre, M D
Psylliodes affinis (Paykull)	COL:Chrysomelidae	1985	Luff, Dr M L
Pterostichus diligens (Sturm)	COL:Carabidae	1985	Eyre, M D
Stenus cicindeloides (Schaller)	COL:Staphylinidae	1981	Reid, C
Stomis pumicatus (Panzer)	COL:Carabidae	1984	Luff, Dr M L
Tachyporus pallidus Sharp	COL:Staphylinidae	1979	Horsfield(1979)
Telmatophilus typhae (Fal.)	COL:Cryptophagidae	1985	Luff, Dr M L
Erynnis tages	LEP:Hesperiidae	1985	DCCT files
1532,Dingy Skipper			
Cleigastra apicalis (Mg)	DIP:Scathophagidae	1984	Ball, Dr S G
Habitat indicator of Reedbed,	Fen, Carr or grazing marsh (2)		
Metasyrphus latifasciatus (Macq.	DIP:Syrphidae	1984	Ball, Dr S G
Nemotelus uliginosus (L)	DIP:Stratiomyidae	1984	Ball, Dr S G
Habitat indicator of Reedbed,	Fen, Carr or grazing marsh		
Neoascia meticulosa (Scopoli)	DIP:Syrphidae	1984	Ball, Dr S G
Habitat indicator of Reedbed,	Fen, Carr or grazing marsh (2)		
Neoascia tenur (Harris)	DIP:Syrphidae	1984	Ball, Dr S G

SHIBDON POND (Continued)

Habitat indicator of Reedbed, Fen, Carr or grazing marsh (2)

Orthonevra splendens (Mg)	DIP:Syrphidae	1984	Ball, Dr S G
Platycheirus fulviventris (Macq.	DIP:Syrphidae	1981	Bruce & Woodfall(1983)
Pyrophaena rosarum (F)	DIP:Syrphidae	1984	Ball, Dr S G

82 species listed
Invertebrate Index = 2150

NATURE CONSERVANCY COUNCIL

INVERTEBRATE

SITE

REGISTER

SITE NAME: SHIBDON POND

GRID REFERENCE: NZ 195628

DATE OR PERIOD OF VISITS:

MODERN COUNTY: TYNE & WEAR

RECORDER:

ALTITUDE M.:

Site Status

National Nat. Res.	
RSPB Reserve	
County Trust Res.	✓
SSSI	✓
Local Authority	✓
Common Land	
Forestry Commission	
Min. of Defence	
National Trust	
Private Owner	
Other, please state	

Confidentiality

At discretion of NCC	✓
Consult recorder	

Sketch Map (showing main areas of invertebrate interest)

Site Description (habitats of interest) 32 acres

Pond, marsh, scrub and dry and wet grassland. Pond fed by springs emerging from scarp slope on S. edge, main input from old mine shaft by swimming bather. Drained by tidal ditch to river Tyne. Marsh dominated by Typha and Glyceria maxima, scrub is predominately Hawthorn with planted Alder and Sallow. Hedgerow on W. boundary borders dry grassland on reclaimed tip.

Main Invertebrate Interest

General Comments (Site importance, conservation problems etc)

Owned by Gateshead M.B.C., ~~and~~ leased to Durham County Conservation Trust and managed jointly.

L.N.R.

N. boundary to be included in proposed Newcastle Western by-pass involving the loss of 6 acres of marsh. (See Shibdon Meadow for additional information)

(Please use back of sheet for further details - eg species lists, literature ref. etc)

Office use

NATURE CONSERVANCY COUNCIL

INVERTEBRATE

SITE

REGISTER

SITE NAME: Shibdon Meadow

GRID REFERENCE: N 2 1 9 8 6 2 9

DATE OR PERIOD OF VISITS:

MODERN COUNTY: Tyne & Wear

RECORDER:

ALTITUDE M.:

Site Status

National Nat. Res.	☐
RSPB Reserve	☐
County Trust Res.	☐
SSSI	☐
Local Authority	☐
Common Land	☐
Forestry Commission	☐
Min. of Defence	☐
National Trust	☐
Private Owner	☑
Other, please state	☐

Confidentiality

At discretion of NCC	☑
Consult recorder	☐

Sketch Map (showing main areas of invertebrate interest)

Site Description (habitats of interest) 11 acres

Old meadow on flood plain of river Tyne has not been ploughed, seeded or sprayed with herbicides or pesticides in recent times. Herb-rich ~~grass~~ grassland with numerous orchids, buttercups, yellow rattle. Bordered on S. side by old rly. line with typical flora plus broom and gorze scrub. Flooded parts during winter months.

Main Invertebrate Interest

General Comments (Site importance, conservation problems etc)

Designated for industrial development. Part of site now ~~occ~~ occupied by pumping station for Northumbrian ~~Water~~ Water Authority. Part to be included in proposed ~~western by~~ Newcastle Western by-pass. Orchid area may be included in Shibdon Pond L.N.R as compensation for loss of reserve land for new road. (See Shibdon pond L.N.R. sheet for further information)

(Please use back of sheet for further details – eg species lists, literature ref. etc)

Office use

NATURE CONSERVANCY COUNCIL

INVERTEBRATE

SITE

REGISTER

SITE NAME: SHIBDON POND

GRID REFERENCE: NZ 19 62

DATE OR PERIOD OF VISITS: 1983 – 1985

MODERN COUNTY: TYNE & WEAR

RECORDER: S G BALL

ALTITUDE M.:

Site Status

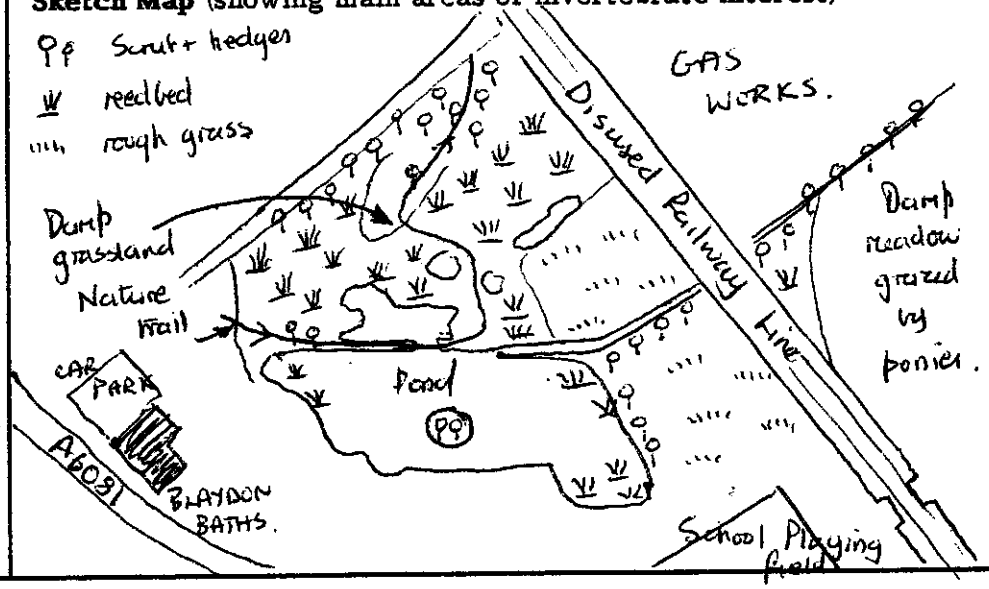
National Nat. Res.	
RSPB Reserve	
County Trust Res.	☒
SSSI	☒
Local Authority	
Common Land	
Forestry Commission	
Min.of Defence	
National Trust	
Private Owner	
Other, please state	

LNR owned by Gateshead MBC

Confidentiality leased to DCCT

At discretion of NCC	
Consult recorder	

Sketch Map (showing main areas of invertebrate interest)



Site Description (habitats of interest)

A subsidence pond next to the site of Blaydon Main Colliery (Closed 1921) with extensive reed beds of Typha and Glyceria. Old hedgerows cross the reserve and hawthorn and sallow scrub is spreading onto drier areas. Areas of herb rich, damp grass fringe the pond in places and there is an old, pony grazed pasture east of the old railway which floods in winter.

Main Invertebrate Interest

Very rich assemblage of wetland insects including a number of nationally rare species of DIPTERA

Stratiomys potamida (RDB3)
Tonchoptera nitidifrons (RDB3)
Platycheirus perpallidus (RDB3)
Orthonevra brevicornis (RDB3)
Odontoea bifasciella (RDB3)
Phortellia griseola (RDB3)
Scaiomyza simplex (RDB3)
Dicilyfina atriceps (RDB3)

PTO.

General Comments (Site importance, conservation problems etc)

Although a fairly recently formed pond the fauna and flora indicates a long established wetland. The fauna previously survived the industrial period in headlands and ditches.

Threats: rising water level drowning the damp grassland
A69 extension is planned along the disused railway line.

(Please use back of sheet for further details – eg species lists, literature ref. etc)

Office use

ODONATA 9 species recorded, 5 probably resident

Coenagrion puella
Enallagma cyathigerum
Pyrrhosoma nymphyla
Ischnura elegans
Lestes sponsa
Aeshna cyanea
A. juncea
Corduliegaster boltonii — probably a visitor from nearby River Derwent.
Sympetrum striolatum

HOMOPTERA 35 species recorded. The following are new records for VC67

Psammotettix cephalotes
Aphrodes albifer
Streptanus aemulans
Paluda adumbrata
P flaveola
Criomorphus williamsi
Eurybregma nigrolineata

HETEROPTERA - poorly recorded

LEPIDOPTERA - poorly recorded. 14 butterfly species have been recorded including DINGY SKIPPER and CLOUDED YELLOW (1983 invasion).

DIPTERA. - many interesting species in addition to the rarities listed overleaf.

Nemotelus nigrinus - damp places, very local
N. uliginosus —— usually associated with saltmarsh.
Oxycera fallineata — 2nd Durham record.
Platypalpus leucocephalus - 1st Durham record, uncommon
Hemerodromia raptoria } reedbed species
Clinocera bipunctata
Achlacus cinereus } - wetland species, very local.
A flavicollis
Teucophorus spinigerellus - new record for North-east.
Tonosvanjella pallidiforcipata - new record for North east

Neoascia tenur
N. reticulosa
Anasimyia contracta
A. lineata
Parahelophilus versicolor
} reedbed associated hoverflies all local and uncommon

Suillia affinis - uncommon
Sciomyzidae - list of 20 species including rarities noted overleaf
Sarcophaga melanura - salt marsh/coastal species
Cleigastra apicalis - reedbeds, uncommon locally
Polietes albolineata - not common, in surprising abundance
Phaonia vicarum - more common than usual in 1984
Limnophora erythrocera } uncommon, wetlands
Lispe pygmaea

HYMENOPTERA 37 species recorded.

Trypoxylon attenuatum - 2nd Durham record - nests in hollow stems of reeds.
Bombus jonellus - uncommon, mainly upland species

411 species listed

COLEOPTERA
110 species.
Nothing especially uncommon but many wetland species

Hygrotrona dimidiata was a new Durham record.

1984

Insects of Shibdon Pond, Blaydon, Tyne and Wear (VC66, NZ1962)

Stuart G Ball

Shibdon Pond is a small site (31 acres) owned by Gateshead MBC and leased to Durham County Conservation Trust. It is an LNR and parts of it are to be designated as an SSSI.

The site was wet farmland until a mine was opened next to it in the early part of the nineteenth century. Much of the reserve area remained as rough, waste-ground throughout the period of mining, although there was some tipping of spoil. The mine closed in 1921 leaving two spring-fed subsidence ponds, the largest of which was infilled as a tip in the 1960s and 70s and the other remains as the present reserve. The Newcastle to Consett railway line, disused since 1963, forms the north-eastern boundary, beyond which there are some seasonally flooded, horse-grazed pastures extending towards the estuary of the River Tyne about 800m from the reserve boundary. Ditches running through these fields are tidal and brackish nearer the river.

The main part of the reserve is the pond itself which is surrounded by extensive reedbeds of Typha and Glyceria fringed in places by damp, herb-rich grassland. There are old hedges from which hawthorn and sallow scrub has spread in the drier areas, augmented by planting.

The reserve was founded largely for its ornithological interest, but has since proved to be botanicaly rich with the field north-east of the old railway line containing a large population of Southern Marsh Orchid believed to be the most northerly on the east coast. The pond has turned out to have a surprisingly rich fenland type fauna, considering its urban setting and industrial past, but it seems likely that elements from the old flood plain of the Tyne have managed to survive in ditches etc., until the formation of the subsidence ponds allowed them to flourish once again.

This study stems from a plan to extend Newcastle's western bypass (A69) along the line of the old railway, which will entail the loss of a strip of land approximately 50-65m wide along its edge. Although I do not think there is any hope of influencing the decision to build the road, it should be possible to minimise the damage to the site by suggesting on which side of the railway line the strip of land should fall.

Sources of information

A number of collecting visits were made in both 1983 and 1984 by myself, assisted by Dr M L Luff and Dr G R Port in 1984; and by an insect survey organised by the Durham County Conservation Trust in 1981. In 1983, wardens employed by Gateshead MBC ran pitfalls in the scrubby areas. The wardens also supplied records of dragonflies from their log books and Mr M D Eyre his records of water-beetles. Some additional records come from Chris Reid, including a note in Entomologist's monthly Magazine (1982) 118 245, and also D. Horsefield in Vasculum (1979) 64 8. Records from all these sources are included in the main species list.

1984 survey using yellow traps

Prior to 1984 insects had been collected on a fairly casual basis and there was no clear picture of the types of fauna that occured on the site or the differences between the various habitats that the reserve contains. To establish this large, systematically collected samples were required. I chose to use yellow water-traps to achieve this. They consisted of round plastic bowls 25cm in diameter and 8cm deep, painted on the inside with a fluorescent yellow-green pigment which has been shown in the past to be very attractive to insects. In use the trap was filled to a depth of 2-3cm with water to which a drop of detergent was added, and insects, attracted by the coloured surface, landed on the water and sank because of the detergent. Pitfall traps were also used and consisted of 100ml

100ml polythene beakers with a gauze covered drainage hole in the bottom.

In the summer of 1984 I ran 12 yellow traps in four groups of three, and 30 pitfalls in two lines of 15 each, for five weeks, emptying them weekly. The yellow trap groups are indicated on the map and were sited as follows:

M. In the headland beside the meadows, north-east of the disused railway. This lies between the old embankment (covered in bramble and rosebay willowherb) and the hedge-flanked outlet stream. The area includes a small muddy pond surrounded by Typha which had dried out at the time.

S. In herb-rich grassland in an open, scrubby part of the reserve. This is a very varied area with scattered sallow and hawthorn bushes, clumps of rosebay willowherb, dry patches with heather, and grassy swards in which northern marsh and common spotted orchids, hay-rattle, hard-heads and many other plants were flowering.

T. About 5m into the edge of a large Typha bed.

G. About 5m into a large Glyceria bed.

The pitfalls were sited close to the 'M' and 'S' yellow trap groups, but in the event caught very little it not being the best time of year for this method.

Material from the yellow traps was sent to the following specialists for identification and comments:

Coleoptera	Dr M. L. Luff, Agricultural Biology, University of Newcastle
Homoptera - Auchenorrhyncha	Dr G. R. Port, Agricultural Biology, University of Newcastle
Hymenoptera, Heteroptera	Dr D. A. Sheppard, Nature Conservancy Council, England Field Unit
Diptera - Tipuloidea	A. Stubbs, Nature Conservancy Council, Chief Scientists's Team

The other determinations of Diptera and Odonata are my own resposibility.

Yellow trap results

The yellow traps were very effective in catching large numbers of Diptera and a range of other insects in smaller numbers. A total of 10,438 individuals of 330 species have been identified to date. The sampling period co-incided with a long, dry, sunny spell and very little rain fell except in the fourth week of sampling. This was fortunate from the point of view of using traps in the reedbeds. The water level began to rise in the last two weeks and in week 4, one of the 'G' group of traps was flooded and most of its contents lost. Only one other loss occured - one of the 'S' group in week 2, presumably moved by a visitor and later recovered from the middle of a hawthorn bush.

Table I summarises the catches made by the four groups of traps accumulated over the five week period and includes three indices of diversity: Fisher's alpha, the Shanon-Weiner index and Sommer's D.