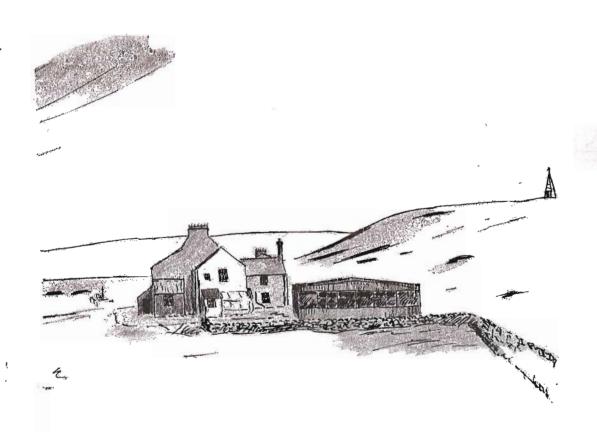
# Aspects of the Ecology of The Northern Pennines

**Occasional Papers** 

No. 10



**MOOR HOUSE** 

"Aspects of the Ecology of the Northern Pennines" is a series of informal review and discussion papers for the reader with a general interest in the subject. They are not official publications of the Nature Conservancy Council and do not necessarily reflect the Council's official views.

#### Aspects of the Ecology of the Northern Pennines

Occasional Papers

No. 10

Birds of Moor House National
Nature Reserve

bу

J. Parkin

"Aspects of the Ecology of the northern Pennines" is a series of informal review and discussion papers for the reader with a general interest in the subject. They are not official publications of the Nature Conservancy Council and do not necessarily reflect the Council's official views.

March 1977

Aspectu of the East of the Morthern Femiliass

and the second s

Coccaining Papers

garkir er den se gere

Dieda of sear Messag Mational

armana Lagrana

"Angecha of the Moology of the northern fearhour in a series of informal review and discussion papers for the color with a senseal tolorest in the subject. They are not official a bilintions of the manne-Conserve av Connell and do not necessarily reflect the Council's official views.

#### Foreword

No list of birds of an area can ever be considered complete and this is very much the case with this paper, the information for which has been gathered from a number of sources over a period of 26 years. In particular, the information is that recorded by Tom Hodgson, who lived at Moor House from 1951 to 1971, and Jim Parkin, who has observed and made regular mist nettings over the last three years. Many others have contributed to the record, and it would be impossible to acknowledge them all, but for his help over many years, we must single out Dr. J. C. Coulson.

Moor House is a large Reserve with a range of habitats that for simplicity we can break down to three; high-level blanket bog, land ranging from 1500-2200 ft. O.D. in the upper basin of the Tees valley; high-level grasslands of the Dun Fells, Hard Hill and Knock Fell; and, the steep west scarp of the Pennines, predominantly acidic grasslands descending to the fell boundary at around 1000 ft. and dissected by deep valleys with fast running becks. For obvious reasons most of the records have been obtained from the first habitat within which the Field Station complex lies.

The annotated list that Jim Parkin has drawn up must of necessity be limited (other information is available in the Reserve Record) in its discussion of individual species, but we hope it will prompt ornithologists to contribute their knowledge, so that future editions of this Occasional Paper can be revised. Perhaps the most interesting thing to come out of the examination of the records is not so much the single occurrence of an 'out of place' bird, but the changes that are occurring over a relatively short period of time in the abundance of habitual visitors. An example of this has been in the decline of the snow bunting. The need for long-term and accurate records is high-lighted by such results. Hopefully the existing records will be examined further and trends described.

#### [remerte]

No list of lived of as area can ever be considered complete and list as very smential that case with this paper, the information for which has been gethered from a number of sources over a seried of 2. years. In particular, the information is that recorded by how Hedgeon, who lived at Hoor House from 1950 to 1971, and tim Persin, who has observed and made regular what nothings over the list three years. Many overse have constituted to the record, and it would be invosable to eclapsicate them all, but failed help over many jears we must sharle out.

\*Noor louse is a large Reserve with a rear of habitate that for shabitaty we can breid down to three high-level blanket bog, lend ranging from 1500-2200 ft. Old. in the upper bould of the fees alloy, bligh havel grasslands of the Dun Welle, familial half knock fell and, the steep west scarp of the Pennines, predominently acidic grasslands doscenting to the fell boundary at around 1000 ft. and dissected by deep valleys with feet manning house. For obvious reasons more of the records have been obtained from the first habitat within which the Field Station complex lies.

The sunctated list that it Parkin has dean up must of necessity be limited (other indemntion in ovilable in the Meneroe Record) in the discussion of individual species but we hape it will prompt crultuologists to contribute their knowledge, so that future edities of this Occasional Facer can be revised. Person at the most interesting thing to some out of the example of the records is not so and the minght occurrence of at out of the records of the unages what are occurring over a relatively short person of this chimdence of babtical visitors. An excepte short this person of this chimdence of babtical visitors. An excepte of this person will be a tening of the results incoming the condition.

#### Aspects of the Ecology of the Northern Pennines

Occasional Paper No. 10

Birds of Moor House National Nature Reserve

bу

J. Parkin

# List of all birds recorded on Moor House National Nature Reserve

PINK-FOOTED GOOSE (Anser fabilis). The only record is of three flying south-west of Moor House on 27 December 1976.

HERON (Ardea cinerea). Regular visitor to the Reserve. Recorded throughout the year though rarely in winter when the streams are frozen. Most records are from the east of the summit ridge, mainly along the Tees and Troutbeck, less often from other streams and pools. It has been recorded passing over the summit ridge and from all streams on the west side. Frogs are the only known food to be taken on the Reserve, but other animals will be taken. The Gamekeeper who lived at Moor House when it was a shooting lodge shot 6 between 1900 and 1928.

WICEON (Anas penelope). Rarely recorded away from Cow Green, all records for the Reserve have come from the Tees. This species which breeds in other areas in the northern Pennines, has not been found to breed on the Reserve, although this was suspected close to Cow Green in 1974. In the mid-1960's breeding did occur on the Westmorland side of the Tees, on ground now covered by Cow Green Reservoir.

TEAL (Anas crecca). Commonest of the ducks recorded on the Reserve, with about 20 breeding pairs. The breeding birds arrive in late March to early April. They nest up to and occasionally above 2000 ft. Young have been recorded on Knock Fell Tarn (2500 ft. 0.D.). There are no breeding records from west of the summit ridge. All nests I have seen have been in heather and always some distance from water. The clutch size is 6-8 with 10 recorded once. Soon after hatching the young are taken to water and moved downstream. I have heard Teal moving their young at night. Outside the breeding season they occur along the Tees and Troutbeck, but all leave during spells of cold weather.

MALIARD (Anæ platyrhynchos). Fewer pairs breed than the Teal, and unlike the Teal all nests I have seen have been close to water and in rushes. The breeding birds arrive back in late March, early April, nesting up to 1800 ft. and possibly over this. The main breeding area being on marshy ground along the Tees, with one or two pairs breeding on the west side. The clutch size is 6-10. The young are taken downstream soon after hatching. Outside the breeding season they are recorded less frequently than Teal and nearly always from the Tees.

Footnote:

Nomenclature and sequence corresponds to that in "The Status of Birds in Britain and Ireland'British Ornithologists' Union, 1971. Blackwell Scientific Publication.

GOOSANDER (Mergus Merganser). Recorded more often than other ducks outside the breeding season, mainly along the Tees and Troutbeck or passing over, sometimes quite high, which indicates migration. Up to three pairs have been recorded along the Tees during the breeding season, but the only proof of breeding was a family of recently hatched young seen at the Tees bridge in 1975.

HEN HARRIER (Circus eyaneus). Rarely recorded passing through on migration in spring and autumn. The species has bred in recent years lower down Teesdale, where it is persecuted by Gamekeepers who for some reason will not tolerate it.

BUZZARD (Buteo buteo). Formerly (up to the 1950's) bred in Swindale and Knock Ore Gill, now only recorded passing and hunting over the Reserve. There has been a drop in recent years in the number of pairs breeding on crags in the northern Pennines. Two possible reasons for this are the decrease in the number of rabbits (they have been increasing over the last four of five years) and the big increase in the number of people seeking recreation on the fells. There has during the same period been an increase in the number of reports of nesting in trees from the Eden Valley area. The Camekeepers at Moor House shot 22 between 1900 - 1928.

GOLDEN EAGLE (Aquila chrysaetos). Recorded annually in the northern Pennines over the last 8-10 years and at all times of year. Not recorded on the Reserve in 1976, but on several occasions during 1974-75. All my own sightings have been of immature birds.

KESTREL (Falco tinnunculus). Commonest of the birds of prey seen on the Reserve, but not recorded breeding 1971-76. In the past it has bred in Swindale, Knock Ore Gill and Hardshins Mine. A pair were seen displaying on three occasions in the Green Hole Moss Flats area in 1976. They were present throughout the breeding season and may have bred on the ground. It is present throughout the year with a small passage of migrants recorded in autumn. Two nestlings ringed in the northern Pennines have been shot in France. Other recoveries in Britain show a mainly southerly dispersal of young, but they have been recovered from North Berwick, Maryport and Windermere. A total of 53 were shot between 1900 and 1928 by Gamekeepers at Moor House. The highest yearly total being 16 in 1922.

MERIJN (Falco columbarius). One or two pairs breed annually on the Reserve east of the summit ridge, there is also a passage of migrants in autumn and to a lesser degree in spring. The following food items have been identified from remains gathered at feeding posts:

Meadow Pipit, Skylark, Dunlin, Snipe, Goldfinch, Redpoll, Linnet, Emperor Moth and Northern Eggar Moth.

A nestling ringed on the Reserve on 7 July 1975 was killed by flying into a window at Ponteland (Northumberland) on 5 September 1975, 58 Km north-east.

Gamekeepers at Moor House shot 60 between 1900 and 1928. The highest yearly total being 10 in 1903 and 1920.

PEREGRINE (Falco peregrinus). Recorded during spring and summer, less often at other times, hunting over the Reserve. Known food taken by Peregrines includes Red Grouse, Golden Plover, Wood Pigeon, Racing Pigeon and Black Headed Gull.

BLACK GROUSE (Lyururs tetrix). Rarely recorded on the Reserve.
They have in recent years bred below the Reserve on the west side,
and may breed on the Reserve in the Crowdundle area. The only
record from the east side is of two males on Matter Hill in 1974.
They are recorded regularly on Bellbeaver Rigg, whilst down the Tyne,
there is a lek of up to 20 males.

RED GROUSE (Lagopus lagopus scoticus). Common breeding species, resident throughout the year, subject of a study, results of which can be found in the Annual Reports.

PARTRIDGE (Perdix perdix). May breed some years on bracken covered ground on the west side. I have known nests in this type of habitat elsewhere in the northern Pennines. No records from east of the summit ridge, occasionally from the west side at any time of the year. A party of 9 were seen by the Silverband track on 13 November 1975, well above the snow line.

OYSTERCATCHER (Haematopus ostralegus). One or two pairs breed annually on gravel beds by the Tees up to 1700 ft. There are also small numbers of non-breeding birds seen during the summer months. Recorded as a passage migrant in spring and late: summer, rarely at other times, and has been recorded passing over the summit ridge.

IAPWING (Vanellus vanellus). Breeding along the Tees up to Fall Crag, on Knock Fell and lower down on the west side. Total breeding population is 20-25 pairs. The breeding birds arrive back in early April, but also recorded as a migrant in spring and summer and occasionally seen passing over in winter months. After breeding is over the birds flock and move down into the valleys, returning by day to feed on the fells in fine weather.

GOLDEN PLOVER (Pluvialis apricaria). Breeding all over the east side of the Reserve but rarely below 1800 ft. on the west side. The breeding population is difficult to estimate, but is in the region of 80-100 pairs. This species has been recorded on the Reserve every month of the year, but rarely between September and December. Normally many of the birds seen early in the year are of the northern race. At this time it is reasonably simple to separate the two races. The breeding birds arrive back in mid-April and breeding is usually underway by the first week in May. Most breeding birds and young have left by the end of July, although some remain into August. A chick about 2 weeks old, was ringed at Moor House on 1 August 1976. These late broods are more than likely to be from replacement clutches.

RINGED PLOVER (Charadrius hiaticula). Only one record from within the Reserve and this was of one seen about a mile above Cow Green, by the Tees. This species is increasing as a breeder in the northern Pennines, and has been recorded nesting at two sites above 1600 ft. and may one day breed along the Tees within the Reserve.

DOTTEREL (Eudromias morinellus). Passage migrant mainly in Spring.

WHIMBREL (Numerius phaeopus). Passage migrant recorded annually in the northern Pennines, usually in autumn, but occasionally in spring. 14 seen passing east to west at Troutbeck Head on 23 August 1974 and one at Troutbeck Bridge on 6 September 1974 are the only records I have for the Reserve. 9 seen flying north over Bellbeaver Rigg on 13 May 1976.

CURIEW (Numerius arguata). The Reserve holds a breeding population of 15-20 pairs. These are mainly east of the summit ridge. A nest was found at 2500 ft. on the summit of Knock Fell in 1975. It is usually April before the breeding birds return, although migrants are sometimes recorded in March. Migration of Curlews sometimes takes place at night, which may be the reason that no flocks have been recorded.

REDSHANK (Tringa totanus). Increasing as a breeder on higher ground in the northern Pennines, where nests have been found up to 2200 ft. A pair was seen in early June 1975 at over 2700 ft. on Cross Fell. No nest was found, but the behaviour of these birds was that of adults with young. Redshank return to the Reserve in early April and have usually left by the end of July. They are rarely recorded at other times. A breeding population on the Reserve of 8-10 pairs are mainly distributed along the Tees with one or two pairs in the Crowdundle area on the west side.

GREENSHANK (Tringa nebularia). Regularly recorded in late summer early autumn. Most records are of single birds, but three were recorded together at Troutbeck Foot in September 1976. One, seen on the Tees between Tees Bridge and Green Burn, stayed for over a week in mid-June 1975.

GREEN SANDPIPER (Tringa ochropus). Recorded in small numbers annually in the northern Pennines, occasionally within the Reserve. All records have been in autumn, though spring records are known from the Eden Valley.

COMMON SANDPTPER (Actitis hypoleucos). Adults arrive back on the Reserve in early to mid-April, and all have left by the end of July. A breeding population of about 30 pairs on the Reserve, nesting up to 2000 ft. on all major streams but occasionally above this on the Tees. A brood of four newly hatched chicks were ringed close to Nether Hearth Bridge on 26 June 1975. I was able to find these chicks again by watching from a Land Rover each evening for the following 11 days. The first 9 days they stayed within 150 yards of the ringing site. On the 10th day they were half a mile downstream on Troutbeck and a further 300 yards downstream on the 11th day. I was unable to find them after this. I have watched adults calling their young on to water and allow them to be washed downstream for about 30 yards before calling them back to land.

SNIPE (Gallinago gallinago). Commonest of the waders recorded on the Reserve. Nests have been found on Little Dun Fell up to 2450 ft., and I am sure they breed higher than this, and use the marshy ground near the summit of Cross Fell. The breeding numbers are very difficult to estimate. The only way seems to be to listen for drumming at dawn. The species is unlike the other waders in sometimes having two broods. The breeding birds are back on the fell by mid-March and have usually left by the end of August. Some migration in autumn, and possibly spring, does take place through the Reserve, but is never very noticeable. It has been recorded in the winter months.

WOODCOCK (Scolopus rusticola). Only occasionally recorded on the Reserve and all records have been from west of the summit ridge. This species may breed some years on marshy and bracken covered ground on the west side. I have known nests in this type of habitat up to 1200 ft. One was watched rodding over Green Castle area.

DUNLIN (Calidris alpina). A number of pairs breed on the Reserve in the Hard Hill - Knock Fell area, and occasionally elsewhere. The breeding birds arrive back in early April and have left by the end of July. The number of breeding pairs of this species seem to vary a great deal from year to year. Rarely recorded outside the breeding season and no obvious migration noted.

COMMON GULL (Larus canus). Recorded from July to September when parties of migrants pass over. Rarely seen at other times. The species has been recorded breeding in the northern Pennines in recent years.

HERRING GULL (Larus argentatus). Rarely recorded.

LECSER BLACK BACKED GULL (Larus fuscus). Breeding does occur on the northern Pennines. On the Reserve, it is recorded as passing over at any time of year. There are also up to 30 birds, mainly immature, summering on the Reserve.

GREAT BLACK BACKED GULL (Larus marinus). Rarely recorded.

BLACK HEADED GULL (Larus ridibundus). A regular visitor to the Reserve in spring and summer from the breeding colonies at Cow Green and Holden Hurth Dam, but rarely seen at other times. A pair nested at 2450 ft. at Knock Tarn in 1976.

WOOD PIGEON (Columba palumbus). Flocks of up to 40 seen passing through on migration in autumn. Rarely recorded at other times.

TURTLE DOVE (Streptoplia turtur). A single bird at Moor House on 25 May 1976 is the only record. One was seen about the same date in Scordale by R. W. Robson, E. Garbutt and D. Lloyd.

COLLARED DOVE (Streptoplia decaocto). Four seen in the Pasture tree enclosure on 22 April 1975 and one on 8 May 1976.

CUCKOO (Cuculus canorus). Rarely recorded on the Reserve and mainly low down on the west side.

SHORT EARED OWL (Asio flammeus). Recorded as a migrant passing through in spring and autumn, but up to two pairs breed on the Reserve on the east side in the Bog End - Force Burn area, and also on the east side of Hard Hill. Known food taken by analysis of pellets includes: Common and Pigmy Shrew, which form the bulk of food taken, with a few Common Voles and many beetles.

SWIFT (Apus apus). Flocks of up to 200 seen hawking for insects around the summits on fine warm days in summer. Also recorded passing over as a migrant.

WRYNECK (Jynx torquilla). One seen in Nether Hearth tree enclosure on 2 September 1974 and one in the Pasture tree enclosure on 30 August 1976, these are the only records. The latter was caught and ringed.

SKYLARK (Alauda arvensis). Most breeding birds are found close to the summit with a few pairs on Hard Hill and down the west side. Rarely recorded below 2000 ft. on the east side. The Skylark arrives back early in the year, usually by the end of February, though this depends on the weather conditions. Also recorded as a migrant in spring and . 923

SAND MARTIN (Riparia riparia). Occasionally recorded throughout the summer months.

SWALLOW (Hirundo rustica). Has bred in the past at Moor House and the buildings at Silverband Mine. Now only recorded passing over during the summer months.

HOUSE MARTIN (Delichon urbica). Occasionally recorded passing over during

TELIOW WAGTAIL (Motacilla flava). First recorded breeding on the Reserve in 1976, a pair rearing two broods close to the Field Station. Also recorded as a migrant in spring and autumn each year.

GREY WAGTAIL (Motacilla cinerea). 5 - 10 pairs breed on the Reserve by streams on both east and west sides, up to 1900 ft. Occasionally recorded on migration in autumn.

PTED WAGTAIL (Motacilla alba yarrellii). About twenty breeding pairs, mainly on the west side, nesting along the streams and in the rocky screes. There is some migration through the Reserve in spring and autumn when they wuse the trees for roosting. Nether Hearth trees held fourteen or fifteen birds on 1 October 1975.

WHITE WAGTAIL (Motacilla alba alba). Three seen in Rough Sike.

vitarens | Plac remoins live been

MEADOW PIPIT (Anthus pratensis). Commonest breeding bird on the Reserve with an average density of about one pair per 25 acres. The highest density is on white ground alongside streams, and the lowest in eroded peat hags and along the summits where the vegetation is too short to give cover for nests. There is also a considerable passage of migrants through the Reserve with flocks of over 100 recorded in autumn. The breeding birds start to arrive in late March and may on occasions be double brooded. The trees around the Field Station are favoured for roosting.

GREAT GREY SHRIKE (Lanius excubitor). One seen in Nether Hearth tree enclosure on 6 and 7 October 1974. This is the only record.

DIPPER (Cinclus cinclus). A resident breeding species that breeds along all major streamsides on the Reserve up to 2400 ft. Only in exceptionally severe weather, when the streams are completely frozen over, do these birds leave the area. This has only happened once in the years 1974-76. In mid-December 1976 all left and did not return until the second week of February 1977. In the winters of 1974-75 and 1975-76 two small roosts were found under the Tees and Troutbeck bridges. Five and four birds respectively were found on the same nights.

During the period of moult, late July August, Dippers are rarely seen, but it is believed that they do not leave the Reserve, but they may become flightless and spend their time skulking under banks. Song can be heard during spells of mild weather, from late October onwards. Breeding at 1800 ft. takes place some four to five weeks later than in the Eden Valley, some 1000 ft. lower. I have never known a case of double brooding above 1600 ft. and those breeding between 1200 ft. and 1600 ft. are not double brooded every year. The Reserve breeding population is between 17 - 19 pairs.

	~ 7 ~			1.75 of a
	Tang canone ay aug Lega yan ferbalik aya	1974	1975	1976
Tees	ing sympological plant of the control of the contro	S	9	9
Troutbeck		3	3	3
Swindale	and to a second	1	1	1
Knock Ore Gil	A County of County A	2 .	2	2
Crowdundle	stu sess 22 te ven b	2	2	2 10
Force Burn	ra a registerras limites	1 (g	mmilitarile a co	.(p.o.1(a)
Mana Divina	charicaej eusk ak Tyd far hadnovski f	- Establish		1 1 1
	. A	Marian .	*	Colores d
winca in colla	right to behave the unit	17	18,136,17	19

These figures are based on counts of birds seen along streams during the breeding season, but not all the nests have been found in any one year, and of those found in 1976 the following habitats were used:-

Vertaovi a Saije,	Waterfalls	5 (9.8)	
uoona ja oi ku ga kadal kawa	Peat banks	Le la	this ally himes and
EURLPHEET KALL LANGE GEROLIES III	Rock face	aurudi pidi Piedron Jukumi listavan	ter of another field
	Bridges	2	9
a serent on	the terretory seems the	12	Sale When the Party of the

hahuaan kegulus ku

The average clutch size is 4.1. Of the 12 nests found, seven were re-visited and the young ringed. For these the average clutch size was 4.4 and a 100% hatching success was recorded.

Nests on peat banks have been recorded where the adults have excavated a depression to hold the nest. This is the only type of nest site where I have known this to occur.

During the breeding season of 1975 it was noted that a small number of non-breeding birds was present on the high ground above Green Burn and Moss Burn. In 1976 no evidence of this was seen.

There are two ringing recoveries of birds crossing the summit ridge. One ringed as a nestling at Kirkby Thore was recovered in the same year at Alston, and one ringed in the Crowdundle area was recovered at Bishop Auckland.

WREN (Troglodytes troglodytes). Has been recorded breeding above 2500 ft. on Cross Fell. On the Reserve it is mainly seen alongside streams where it builds its nest under over hanging banks or in cracks in rocks. It also breeds in the tree enclosures, and occasionally in areas of eroded peat. In some years it is possibly more common than the Skylark. Also recorded on migration and occasionally during the winter months.

DUNNOCK (Prunella modularis). At least one pair breeds annually in the tree enclosures. Also recorded as a migrant in autumn and to a lesser extent in spring. One stayed at Moor House throughout the winter of 1976-77 when temperatures dropped to -18°C, and snow covered the ground throughout December and January. It survived by feeding on food put out for the sheep and dog, and roosted in the buildings.

ROBIN (Erithacus rubecula). Recorded as a passage migrant in autumn. Less often recorded in spring and rarely at other times.

BLACK REDSTART (Phoenicurus ochruros). A female seen at Moor House on 7 April 1976 is the only record for the Reserve. It was observed from a distance as close as 10 ft.

REDSTART (Phoenicurus phoenicurus). Recorded annually in spring and more often on autumn migration. Seen mainly in the tree enclosure and occasionally on the open fell. A female was seen on 1 November 1976 by the Reservoir in Rough Sike.

WHINCAT (Saxicola rubetra). Small numbers recorded on migration in spring and autumn.

STONECHAT (Saxicola torquata). All records have been in autumn, usually in small parties of up to 5 birds.

WHEATEAR (Oenanthe oenanthe). Up to thirty pairs breeding on the west side with only three or four on the east. The first Wheatear is usually recorded in late March or the first few days of April but it is mid-April before they appear in any number. The Wheatear declined in number in the late 1960's and has not recovered, though there has been a small increase over the last two years. Also recorded on passage migration.

RING OUZEL (Turdus torquatus). The Ring Ouzel returns to the Reserve in early April. A breeding population is estimated of 10-15 pairs on the west side, and only three to five pairs on the east. The usual nest site is a rock ledge, but on the east side they have been recorded building nests on grass covered banks, under overhanging heather in peat hags, and up to 8ft. above the ground in the tree enclosures. Also recorded as a migrant when up to thirty have been recorded in flocks of mixed birds of the thrush family.

BLACKBIRD (Turdus merula). At least one pair breeds each year, either in the buildings at Moor House or in the tree enclosures nearby. A common spring and autumn migrant, also recorded occasionally during the winter months.

FIELDFARE (Turdus pilaris). Has been recorded in every month except July and August. During autumn migration flocks of up to 300 have been recorded, but usually they are much smaller than this. Fieldfares do feed on the fells in early autumn and have been known to roost in heather and in the tree enclosures.

REDWING (Turdus iliacus). Is a common migrant in autumn, but less common in spring, and often heard passing over during the night. Like Fieldfares they feed on the fell, but are not known to have roosted in the heather, though they often use the trees.

SONG THRUSH (Turdus philomelos). Occasionally recorded in the summer months, and as a spring and autumn migrant. A cock bird sang for over a fortnight in Nether Hearth tree enclosure in May and June 1976, but failed to attract a mate.

MISTLE THRUSH (Turdus viscivorus). After breeding is completed in the valleys flocks of up to thirty have been seen feeding on the fells, returning to the valleys at night. Also recorded as a passage migrant.

SEDGE WARBLER (Acrocephalus schoenobaenus). Single birds were recorded in Nether Hearth tree enclosure on 30 May 1976 and 7 August 1976. Both were caught and ringed.

GARDEN WARBLER (Sylvia borin). One, the only record, was caught in the Pasture Tree enclosure on 6 August 1976.

BLACKCAP (Sylvia atricapilla). A hen bird was seen in Nether Hearth tree enclosure on 5 May 1975 and a male in the same enclosure on 6 and 29 September 1976.

WILLTETTROAT (Sylvia communis). One bird, the only record, was seen in the Pasture tree enclosure on 8 May 1976.

WILLOW WARBLER (Phylloscopus trochilus). A common migrant in spring and autumn.

CHIFF CHAFF (Phylloscopus collybita). Only record is one heard in the Pasture tree enclosure on 22 April 1974.

GOLDCREST (Regulus regulus). Bred in Bog End trees in 1974 and Pasture tree enclosure in 1975. No proof of breeding in 1976 although present for much of the summer. A passage migrant with greater numbers recorded in autumn than in spring. A total of twenty four were caught and ringed in two hours on 19 October 1976 in the Pasture and Nether Hearth enclosures. There were many more in the area and all had left by mid-day.

PIED FLYCATCHER (Ficedula hypoleuca). A female was recorded in Nether Hearth tree enclosure on 23 May 1976 and this is the only record.

SPOTTED FLYCATCHER (Ficedula striata.). A few are recorded on migration in both spring and autumn most years.

GREAT TIT (Parus major). Rarely recorded, mostly in autumn.

BLUE TIT (Parus caeruleus). Most records are in autumn and only occasionally at other times.

CORN BUNTING (Emberiza calandra). A male singing from the Meadow wall on 18 April 1975 is the only record.

YELLOW HAMMER (Emberiza citrinella). Rarely recorded, but usually one or two appear each year during the summer.

REED BUNTING (Emberiza schoeniclus). A male bird was heard singing by the Tees near Sike Hill in May 1975. All other records have been in autumn.

SNOW BUNTING (Plectrophenax nivalis). A winter visitor in small numbers most years though flocks of up to 200 have been seen in the northern Pannines some years. Now less common at Moor House than in the late 1950's and 1960's.

CHAFFINCH (Fringilla coelebs). A passage migrant in spring and autumn, also a non breeding summer visitor and an occasional winter visitor.

BRAMBLING (Fringilla montifringilla). A cock bird caught and ringed at Nether Hearth tree enclosure on 4 October 1976 is the only record.

GREENFINCH (Carduelis chloris). A passage migrant more often recorded in autumn than spring but occasionally at other times.

GOLDFINCH (Carduclis carduclis). Can be seen at any time of year, but is most common in autumn.

REDPOLL (Aganthis flammea). Bred in Pasture tree enclosure and Nether Hearth tree enclosure in 1975, two nests being found. In 1976 they were present during the breeding season but were not proved to breed. Also recorded annually on migration in spring and more often in autumn.

TWITE (Aganthis flavirostris). Rarely recorded.

LINNET (Aganthis cannabina). Bred in Pasture tree enclosure and Nether Hearth trees in 1975 and 1976. A reasonably common migrant in autumn but less often seen in Spring.

BULLFINCH (Pyrrhula pyrrhula). One record of one male and two females seen at Moor House on 19 October 1975.

HOUSE SPARROW (Passer domesticus). A few turn up each year usually in late summer and autumn.

TREE SPARROW (Passer montanus). As for the House Sparrow above.

STARLING (Sturnus vulgaris). Formerly bred at Moor House and in the buildings at Silver Band Mine. Now only recorded as a migrant and feeding on the fells in the summer months. Flocks of up to 300 have been recorded. Also recorded occasionally during the winter months.

MAGPIE (Pica Pica). One at Moor House on 7:April 1976 is the only record.

as musel and substitution of the W. of the contract the third and the Co.

a ver gring the friend over first blind is a construct of a large from the large from the construct of a large confi

Account of the file of St. A. A. Co. of a

r i dia e con l'acon r recommendations

JACKDAW (Corvus monedula), ROOK (Corvus frugilegus), and CARRION CROW (Corvus corone). Mixed flocks of these species spend the summer after the breeding season is over, feeding on the fells and returning to the valleys at night. All have been recorded occasionally at other times though none breed on the Reserve.

RAVEN (Corvus corax). Regularly recorded throughout the year.

anadem is a surface of the most in a filler of the contract.

## Appendices

1. Species recorded between 1974 and 1976.

Heron Common Gull

Pink-Footed Goose Herring Gull

Wigeon Lesser Black-Backed Gull

Teal Great Black-Backed Gull

Mallard Black-Headed Gull

Goosander Wood Pigeon

Hen Harrier Turtle Dove

Buzzard Collared Dove

Golden Eagle Cuckoo

Kestrel Short-Eared Owl

Merlin Swift

Peregrine Wryneck

Black Grouse Skylark

Red Grouse Sand Martin

Partridge Swallow

Oystercatcher House Martin

Lapwing Yellow Wagtail Transfer to

Golden Plover Grey Wagtail

Ringed Plover Pied Wagtail

Dotterel White Wagtail

Whimbrel Meadow Pipit

Curlew Great Grey Shrike

Redshank Dipper

Greenshank Wren

Green Sandpiper Dunnock

Common Sandpiper Robin

Snipe Black Redstart

Woodcock Redstart

Dunlin Whinchat

Yellow Hammer Stonechat Reed Bunting Wheatear Snow Bunting Ring Ouzel Sadow Bull Blackbird Chaffinch Libral Brambling Fieldfare Greenfinch Redwing googia book Goldfinch Song Thrush evo altara Redpoll Mistle Thrush owed because Twite Sedge Warbler Linnet Garden Warbler Blackcap Bullfinch Whitethroat House Sparrow Tree Sparrow Willow Warbler Chiff Chaff Starling Goldcrest Magpie Pied Flycatcher Jackdaw Spotted Flycatcher Rook Great Tit Carrion Crow

Raven

Corn Bunting

Blue Tit

2. Additional species recorded before 1974.

WHOOPER SWAN (Cygnus cygnus). Five flying south west at Trout Beck on 19 October 1961. (A. J. P. Gore).

GREYLAG GOOSE (Anser anser). (T. L. Hodgson and others)

SHELDUCK (Tadorna tadorna). Seen on 3 February 1964 and 9 April 1964 (T. L. Hodgson, also reported by Dr. J. C. Coulson).

POCHARD (Aythya ferina). Seen on 11 May 1954 (A. Millar) and 6 June 1970 (T. L. Hodgson).

PTARMIGAN (Lagopus mutus). Seen on 12 December 1961 on Knock Fell (A. Eddy). There is a history of albinism in Red Grouse in this area, and I feel this is the case with this bird.

PHEASANT (Phasianus colchicus). Date unknown, but in the late 1960's in Nether Hearth tree enclosure (T. L. Hodgson).

MOORHEN (Gallinula choropus). This species was recorded breeding at Lady Vein and Holden Hurth, by T. L. Hodgson. Both these sites are close to the eastern boundary of the Reserve, but just off it.

SPOTTED REDSHANK (Tringa erythropus). Recorded by Dr. J. C. Coulson, (date unknown).

JACK SNIPE (Lymnocryptes minima). Two at Hood Crag on 20 April 1956 (E. Roberts).

BARN OWL (Tyto alba). Seen on 12 and 13 July 1963 at Nether Hearth (T. L. Hodgson).

SNOWY OWL (Nyctea scandiaca). Seen on 23 March 1957 at Force Burn (T. L. Hodgson).

TAWNY OWL (Strix aluco). Seen on 18 May 1953, 8 October 1957, 15 June 1958, 22 August 1958 and 5 February 1964 (T. L. Hodgson, also reported by Dr. J. C. Coulson).

SISKIN (Carduelis spinus). On 20 October 1963 in Rough Sike and 22 May 1964 on House Hill. Both were found dead (T. L. Hodgson).

<b>5</b> •	terration heave	Server Marie Address A
9	Total number of species recor	ded 1974-76 - 97 - 9390000
	Additional species 1952-73	(12) 12) 12) 13) 14)
	to we will be to the second of	109
j,	on filler filt (A. Millar) on	and the state of t
ek Fell. this sare	Number species recorded breed	The property of the property o
J.p	Additional species 1952-73	76 26
ALC: NO PERMIT	Additional Species 1992-79  and behaves the actions the company of	"Out of the Property of the pr
corlac	o i to get bubblend alegaria.	SARKAL LIFLEN CO (Obta urlugan).

(ibste urlmour), And we can been as some (so a life of the second of the life of the second of the seco

AME Sold (a thirty of the color of the season) and the first on the season of the seas

4.	Breeding	species
, ,	m m a co commert for	RINGOTOR

Spooted .	1974	1975	1976
Teal	ж	x	30
Mallard	x	x	ж .
Merlin	x	x	×
Red Grouse	x	30	30
Oystercatcher	x	x	20
Lapwing	x	x	x
Golden Plover	ж	x	×
Curlew	x	x	<b>2C</b>
Redshank	ж	x	ж
Common Sandpiper	ж	x	x
Snipe	x	x	×
Short-Eared Owl	ж.	x	x
Skylark	ж	<b>x</b> .	×
Yellow Wagtail			x
Grey Wagtail	x	x	×
Pied Wagtail	x	×	30
Meadow Pipit	x	x	x
Dipper	x.	. ×	x
Wren	х	x	x
Dunnock	ж	x	x
Wheatear	x	x	x
Ring Ouzel	X .	x	x
Blackbird	x	x	x
Goldcrest	ж	x	
Redpoll		x	
Linnet		x	ж

Additional species recorded breeding 1952-1973

Buzzard, Kestrel, Swallow, Starling.

## 5 Pasture Tree Enclosure (1850 feet O.D.)

Species recorded breeding:-

	1974	1975	1976
Meadow Pipit	x	×	x
Wren	x	x	
Dunnock			x sound (
Ring Ouzel		x	Taring T
Blackbird			x
Goldcrest		×	4.1.00
Redpoll		ж	
Linnet		x	x
Nether Hearth Tree Enclosure (1800	) feet O.I	).)	
Species recorded breeding:			
Common Sandpiper		x	x
Pied Wagtail	x		
Ring Ouzel			x
Blackbird		x	
Redpoll		x	
Linnet		x	×

## Note: -

The tree enclosures are two small areas, each of an acre, in which Pine (mainly Pinus contorta, P. mugo and P. sylvestris) Sorbus intermedia and S. aucuparia, and a few other species, are growing to a height of 18 feet, but with great variability. The Pasture enclosure has provided dense thicket condition, whilst Nether Hearth, with trees planted in clumps on an old lead mine site, has taller trees but is mostly unplanted. Further details are given in the Reserve Record.

## 6. Species ringed on or close to the Reserve: -

	descret (nonthrush).	1974	1975	1976	S. Syse.
Merlin		1771	4	. 770	
Lapwing	- X	S	7	10	e and box IV
Golden Plover		O O	, 5	39	or to salidate
Redshank			2	L <sub>L</sub> .	i is zoležo!
Common Sandpipe	er	1	7	muotas. Ž	di haddogii
Snipe		2	1.		Man Mic
	ull (Cow Green)	<i>L</i> _	, 52		John head
Short-Eared Owl	1031		2	2	domizio N
Wryneck			4	1	g Luinerti
Yellow Wagtail				10	nerti meletih
			<i>L</i> <sub>3</sub> .	5	Patientin's
Grey Wagtail		18	7	ر 14	
Pied Wagtail	87		66		
Meadow Pipit		9		138	
Dipper		23	7	32	
Wren			10	6	
Dunnock		2		14	
Robin		2	2	9	
Redstart				2	
Whinchat			1	6	
Stonechat				1	
Ring Ouzel		3	3	10	
Blackbird		6	14	27	
Fieldfare			1	1	
Redwing			2	9	
Song Thrush			5	12	
Mistle Thrush				1	
Sedge Warbler				2	
Garden Warbler				1	

STATE OF STA

griffent a bes

# 6. Species ringed on or close to the Reserve (continued):

Blackcap	12				2
Willow-Warbler	6.		2	22	26 Jahran .
Goldcrest			3	20	36 W met/, tost .
Spotted Flycatcher	150				ปการเลิญ
Blue Tit	4.		8	$l_{lap}$	rarigansa norman
Reed Bunting		53	J	1	2 . Soline
Chaffinch	. 10			(neura) 500 10	Teb belocal real
Brambling				÷	of boust-37 de.
Greenfinch				1	1 OF CLESSING
			4	1	2 Tyal vyffel
Goldfinch			1	1.	fisher! a red!
Redpoll	•		1	<i>ι</i> <sub>+</sub>	3 Haral hold
Linnet				18	14

#### 7. Recoveries of birds ringed at Moor House

v 305 1

Meadow Pipit - ringed 6 September 1976, controlled Sark, Channel Islands on 17 October 1976.

Merlin - ringed as a nestling 7 July 1975, killed by flying into a window at Ponteland, Northumberland on 5 September 1976.

Snipe - ringed 20 June 1975 as a chick, shot at Maboy near Portglenone. Antrim on 1 November 1975.

Blue Tit - ringed on 27 September 1974, killed by a cat at Cotherstone, Yorkshire on 6 June 1975.

Robin - ringed on 19 August 1974, controlled at Flackney, Leicester on 24 January 1976.

Dipper - ringed as a nestling on 2 June 1970, controlled at Bishop Auckland on 20 November 1970.

A number of birds return to Moor House for two or three consecutive years. Since 1974 this has included Meadow Pipits, a Blackbird, Ring Ouzel and Pied Wagtail.

<sup>\*</sup> The term controlled refers to a bird that has been caught elsewhere and released.

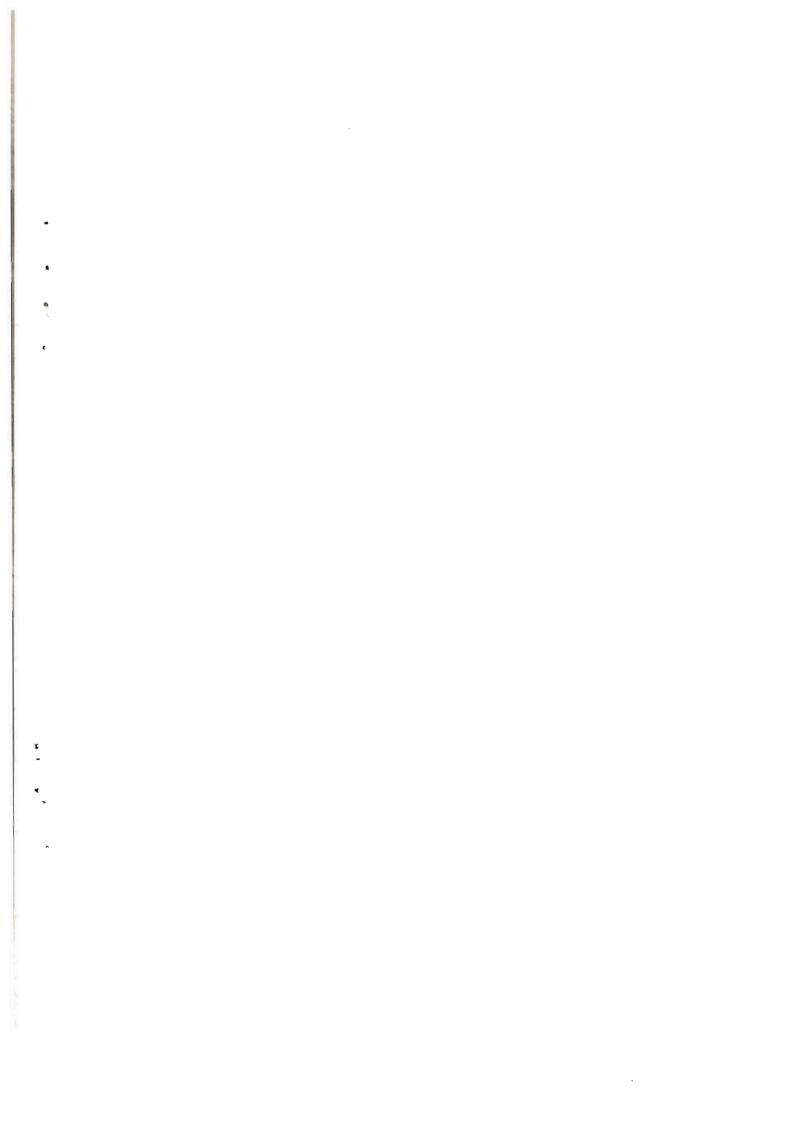
References to Moor House publications on Birds

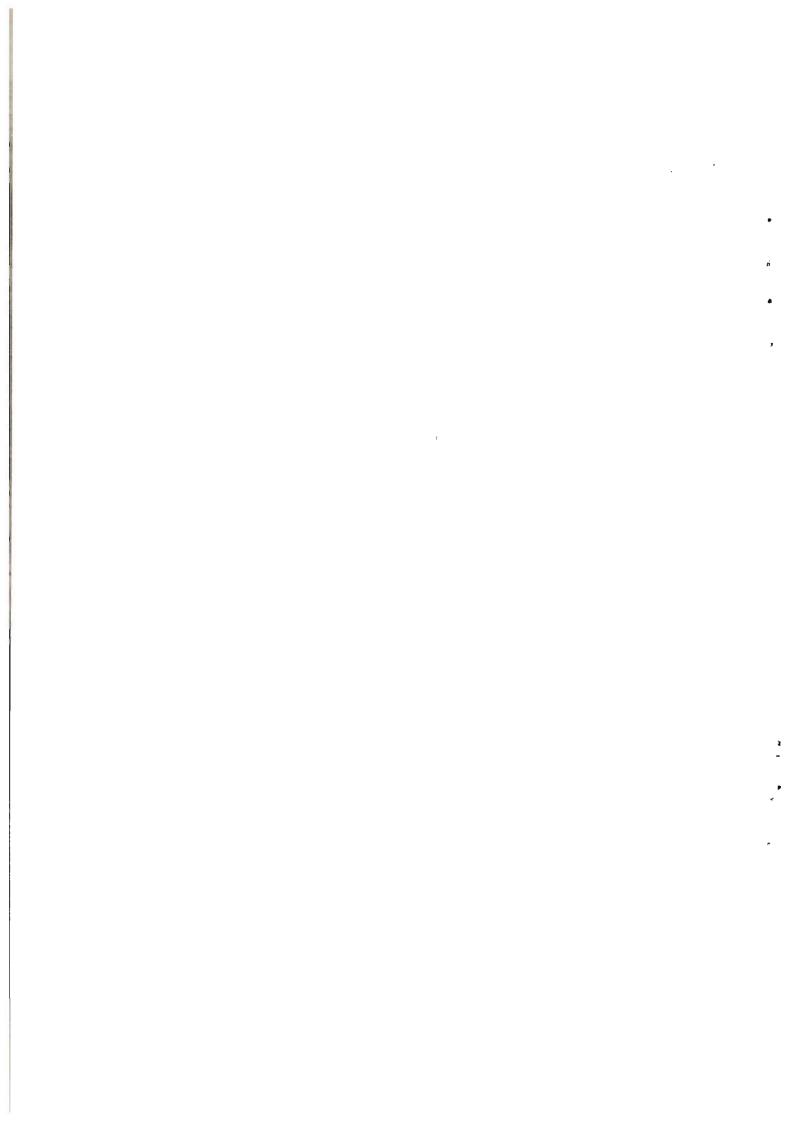
LOUIS LOTE MOS MODEL TO THE THE TE

 $\bigcap \underline{\Gamma}_{k}^{*}(x) = \Sigma_{k-1}^{*} \cdot \dots \cdot$ 

- COULSON, J. C. 1956. Biological studies on the Meadow Pipit (Anthus pratensis) and moorland Tipulidae, members of a food chain. Ph.D. Thesis, University of Durham.
- COULSON, J. C. 1956. Mortality and egg production of the Meadow Pipit, with special reference to altitude. Bird Study, 3, 119-132.
- REYNOLDS, J. C. and RANDALL, M. G. M. 1975. Some aspects of moorland ecology. Durham University, Zoology Research Project.
- TAYLOR, P. and RAWES, M. 1974. The ecology of the Red Grouse. In: Aspects of the Ecology of the northern Pennines. Moor House Occasional Paper, No. 6.

e eight in sed Vije zoeld Diesek een Bird







7 t. Tulle er en gren