

3a Loch Scarmclate SSSI 39/190600

An important mesotrophic loch with rich marginal vegetation. Large numbers of wintering wildfowl use the loch and the gently sloping open areas of reseeded and rough pasture around the loch, especially to the north and south sides, are well frequented by greylag and White fronted geese. This area is used by Greenland White fronts at some time every winter. Geese have been seen flying between here and Loch Heilen (southward in late afternoon - almost dusk on one occasion), but during the census, birds feeding locally flew to the loch to roost each night.

Drainage and Agricultural Change

None known.

Disturbance

Messrs Coghill at Stemster House were issued a license to shoot greylags from DAFS for their land north of Loch Scarmclate at Stemster, Poolhoy and Knockdee in 1983/84. Morning shooting dispersed birds away from the land under pressure, hence geese have not been shot here. A licence has been applied for in spring 1985. In addition, there is some shooting of wildfowl and a few greylags on the loch as well as background agricultural disturbance and possibly disturbance by anglers.

Numbers

1972/73: 02/04: 75; 03/04: c 150
1974/75: 10/11: c 80; 17/11: 90; 20/11: 110-120
1977/78: 27/04: 6
1978/79: 05/11: c 80; 18/03: 130
1979/80: 16/10: 2; 25/02: 65 (flew to Durran Mains to Loch Heilen and back to Durran Mains); 08/03: "flock present"
1981/82: 14/04: 68; 16/04: 77; 17/04: departure?
1982/83: 14/11: 4; 12/12: 22; 02/01: 28; 13/03: 73; 20/03: 68;
01/04: 77 (no young); 13/04: c 70; 17/04: 80
1983/84: 25/03: 102; 01/04: 67
1984/85: 02/12: 67-70; 09/02: 129 (4, 3, 3, 2, 2, 2, 1 and 1 j);
10/02: c 80 (4, 4, 3, 3, 2, 1, 1 and 1 j); 17/02: 95;
10/03: 21; 17/03: 76; 25/03: 83 flew in to roost;
27/03: 80 flew in to roost; 31/03: 80 (3, 2, 2, 1, 1 and 1 j);
01/04: 80

Darvics

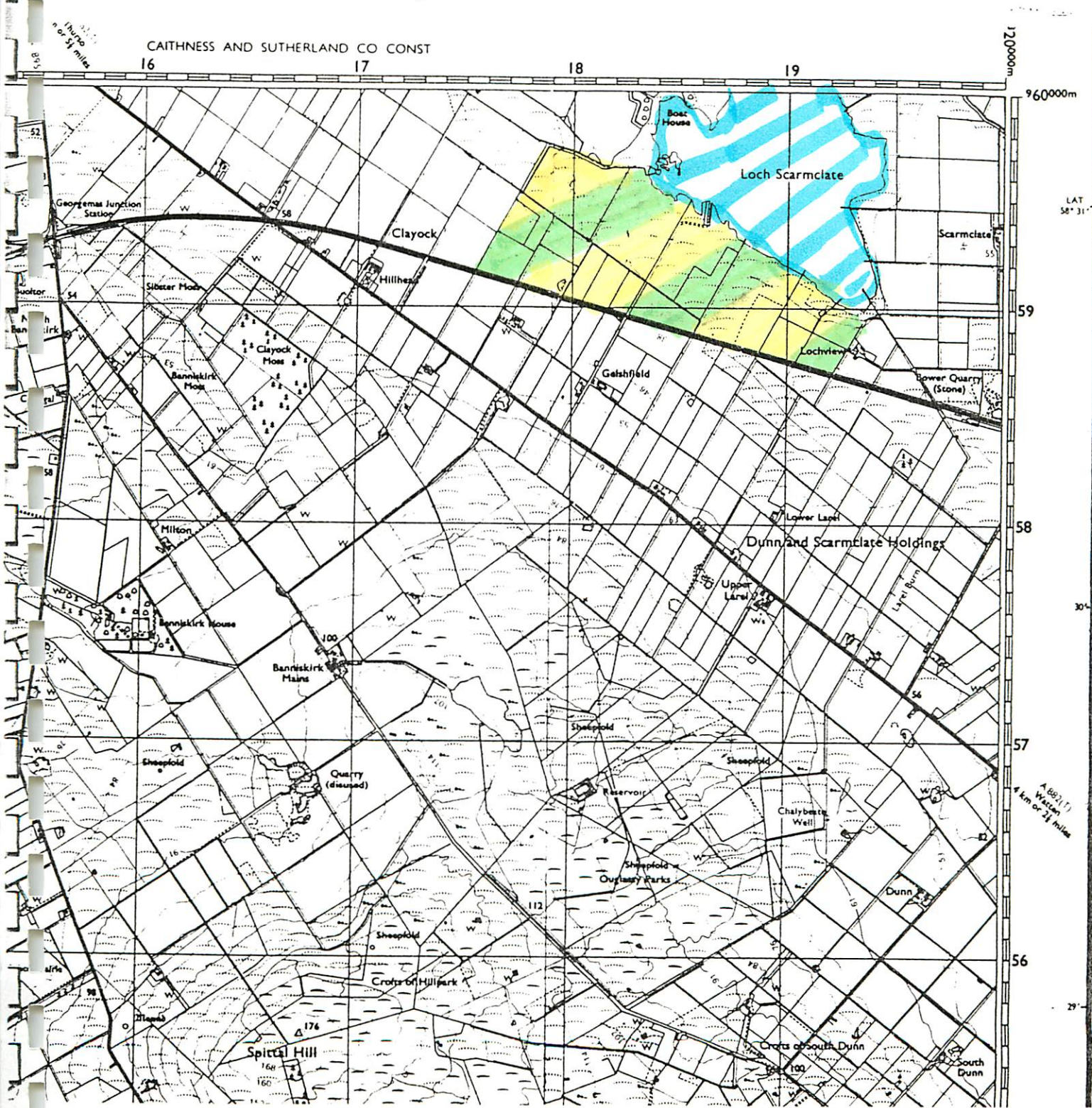
Despite numerous scans of legs at this site over a number of years, no darvics have ever been seen at this important site.

Roost

Although seen flying to Loch Heilen in past years, this loch appears to be a consistent roost for the goose flock frequenting central Caithness.

Census

During February counts, the Scarmclate group were seen on the fields to the south-west of the loch, giving a good opportunity to age the group and check for darvics. Of 129 geese on 9 February 1985, broods of 4, 3, 3, 2, 2, 2, 1 and 1 were present and there were no darvics out of over 100 birds checked. These birds flew down to the loch to roost in the evening and were clearly not commuting to Loch Heilen at that time. On 25 and 27 March, the White fronts were feeding on Corsback and were watched flying in to roost on Loch Scarmclate at dusk, numbering 83 and 80 respectively. The flock (numbering 80) were at the loch on 1 April also.



3b Loch Watten SSSI 39/230560

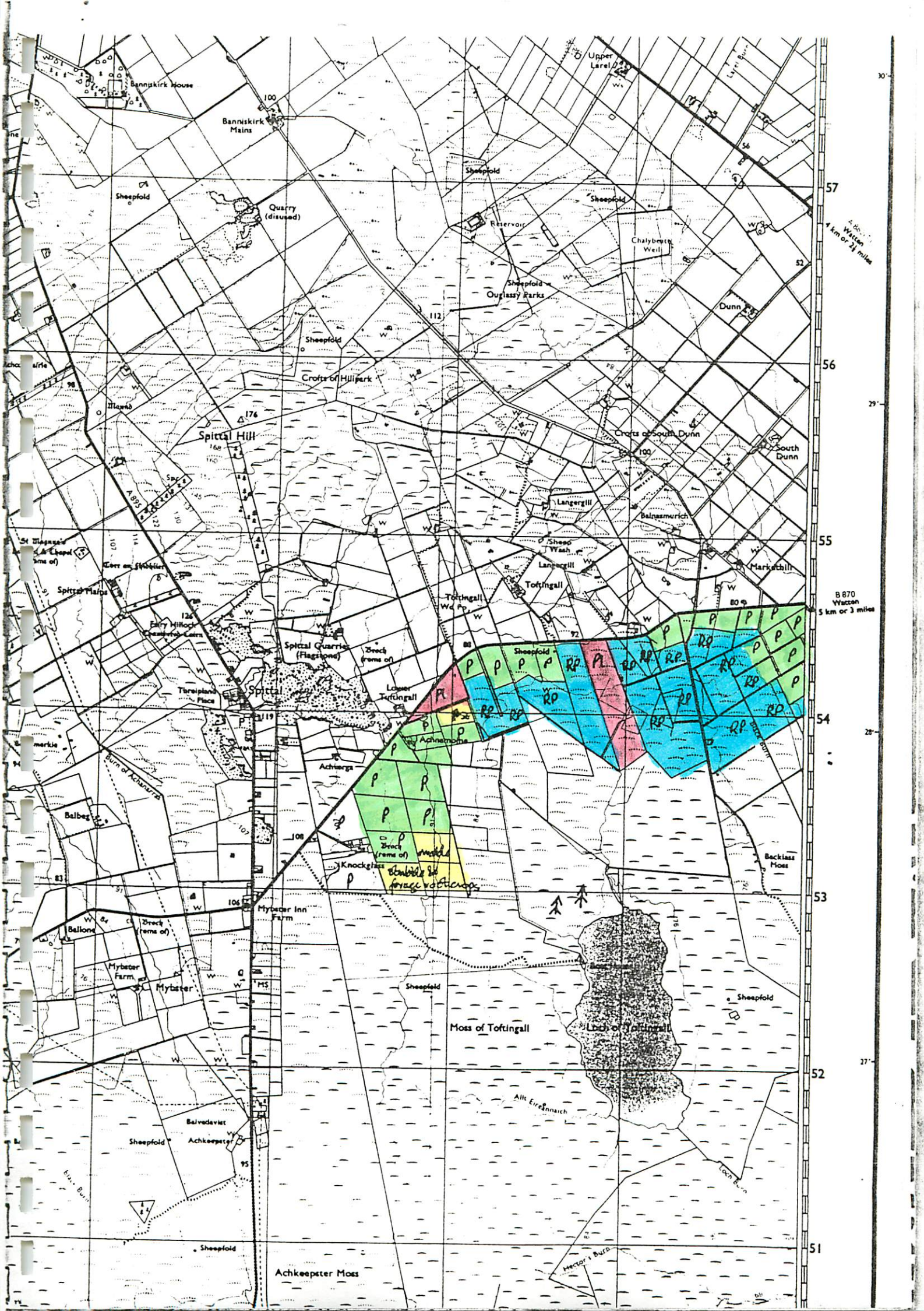
The loch is a large shallow exposed base-rich loch with a variety of marginal vegetational types. The peripheral agricultural land at the north-west end has frequently attracted Greenland White fronts, and forms part of the Loch Scarmaclate complex (qv). Two birds were seen in flight over the south-east end of the loch on 29 March, but no birds were found when the loch was checked for geese on 25, 27, 28 or 30 March 1985.

Numbers

1975/76: 21/03: 30

3c Knockglass 39/180530

An area of cereal and clean pasture with a matrix of rough pasture and peatland vegetation adjacent to Loch of Toftinghall. This area was checked without success for geese on 9 and 10 February and 24, 28 and 31 March 1985.



Banniskirk House

Banniskirk Mains

Sheepfold

Quarry (disused)

Sheepfold

Reservoir

Sheepfold

Chalybeate Well

Sheepfold Ouglassy Farks

Dunn

Sheepfold

Crofts of Hillpark

Crofts of South Dunn

South Dunn

Spittal Hill

Langergill

Balnamurich

Spittal Mains

Spittal

Spittal Quarries (Flagstone)

Broch (remains of)

Toftingall

Toftingall

Market Hill

Sheepfold

RP

P

P

P

Spittal

Lower Toftingall

Achnamona

RP

P

P

P

Toreplan Place

Achna

Broch (remains of)

Knockglass

RP

P

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P

Balbeg

Mybater Inn Farm

Knockglass

Broch (remains of)

RP

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Ballone

Mybater Farm

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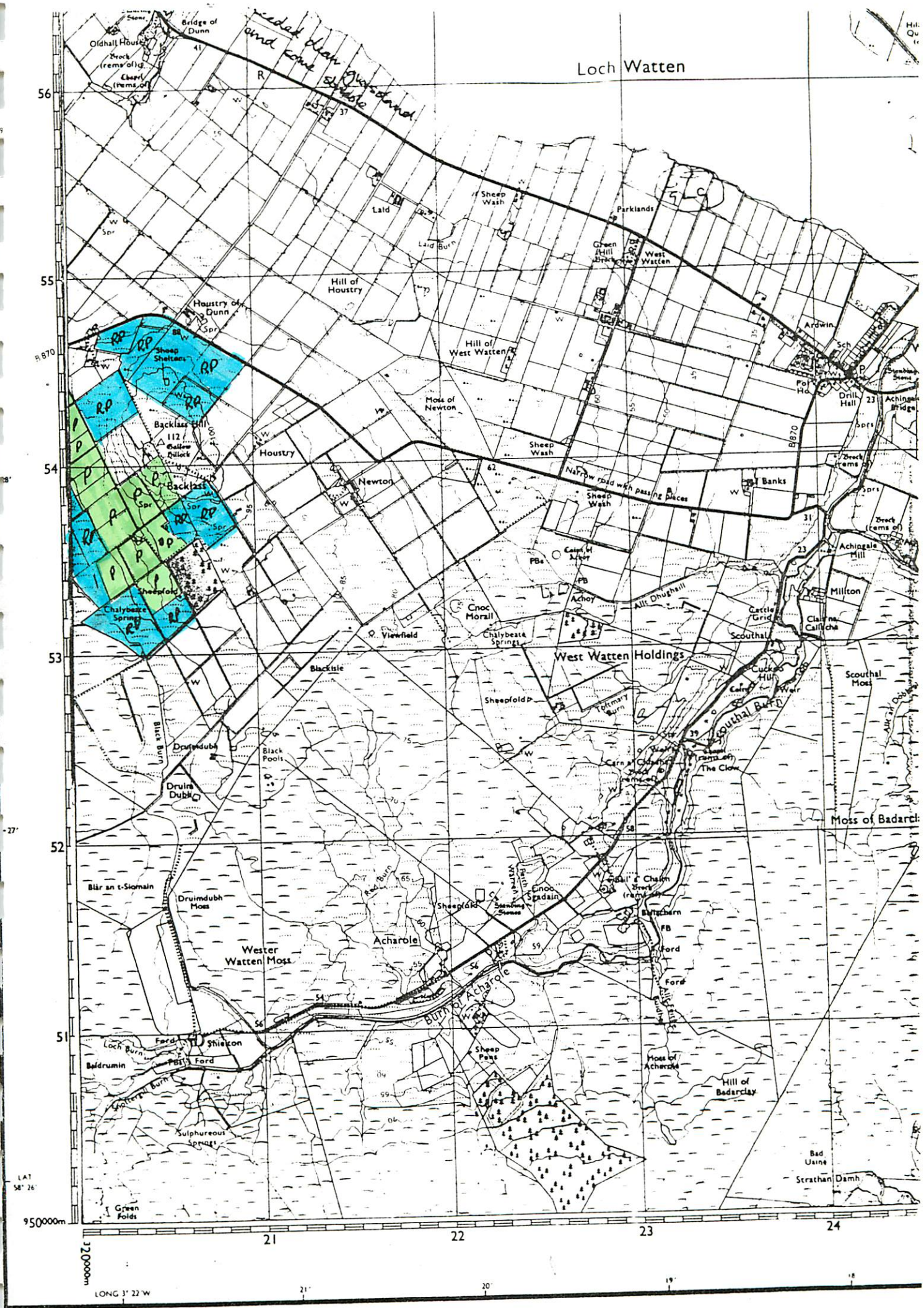
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3d Houstry - Backlass 39/210530

A rocky knoll swathed in rough pasture, reseed and some cereal area used in conjunction with Toftinghall. This area was also checked without success for geese on 9 and 10 February and 24, 28 and 31 March 1985.

Numbers

1980/81: 15/11: c 100; 16/11: 80-85 flew NE from Loch of Toftinghall



Loch Watten

*redat than ground
and some stone*

Ht. Qu. 10

56

55

54

53

52

51

21

22

23

24

LAT 56° 26'

LONG 3° 22' W

320000m

Bad Uaine

Scrathan Dam

Moss of Badarclay

Scouthal Moss

Achingale Mill

Drill Hall

Ardwin

Parklands

Green Hill

West Watten Holdings

Scouthal

Millton

Green Hill

Green Hill

Scouthal Burn

Scouthal

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3e Loch of Toftinghall 39/190529

A base-poor peaty loch with little marginal vegetation and steep peaty banks, surrounded by blanket mire, recently planted on the western side which may have caused disturbance. The huge area to the south is open peatland with well developed pool and hummock topography and hence very attractive and worthy of exploration.

Drainage and Agricultural Change

Area immediately adjacent to loch drained and planted.

Disturbance

Probably little or no disturbance in previous years, but since 1980 large areas of moorland and flowbog adjacent to the loch have been ploughed and planted with conifers and a new track extends down to the lochside where hitherto a 2 km walk over rough ground was necessary. The site is much used by fishermen but rarely when the geese are in residence. The loch is base-poor, with little emergent vegetation so is unattractive to other wildfowl or wildfowlers.

Numbers

1980/81: 16/11: 80-85; 27/12: 50+; 28/12: 46
1982/83: 14/11: 152 flew NE from loch 08.50

Roost

Toftinghall is undoubtedly a roost, but used only occasionally; the 152 were seen leaving the loch at 08.50 to fly north-east and hence may be part of the Heilen/Scarmclate group.

Census

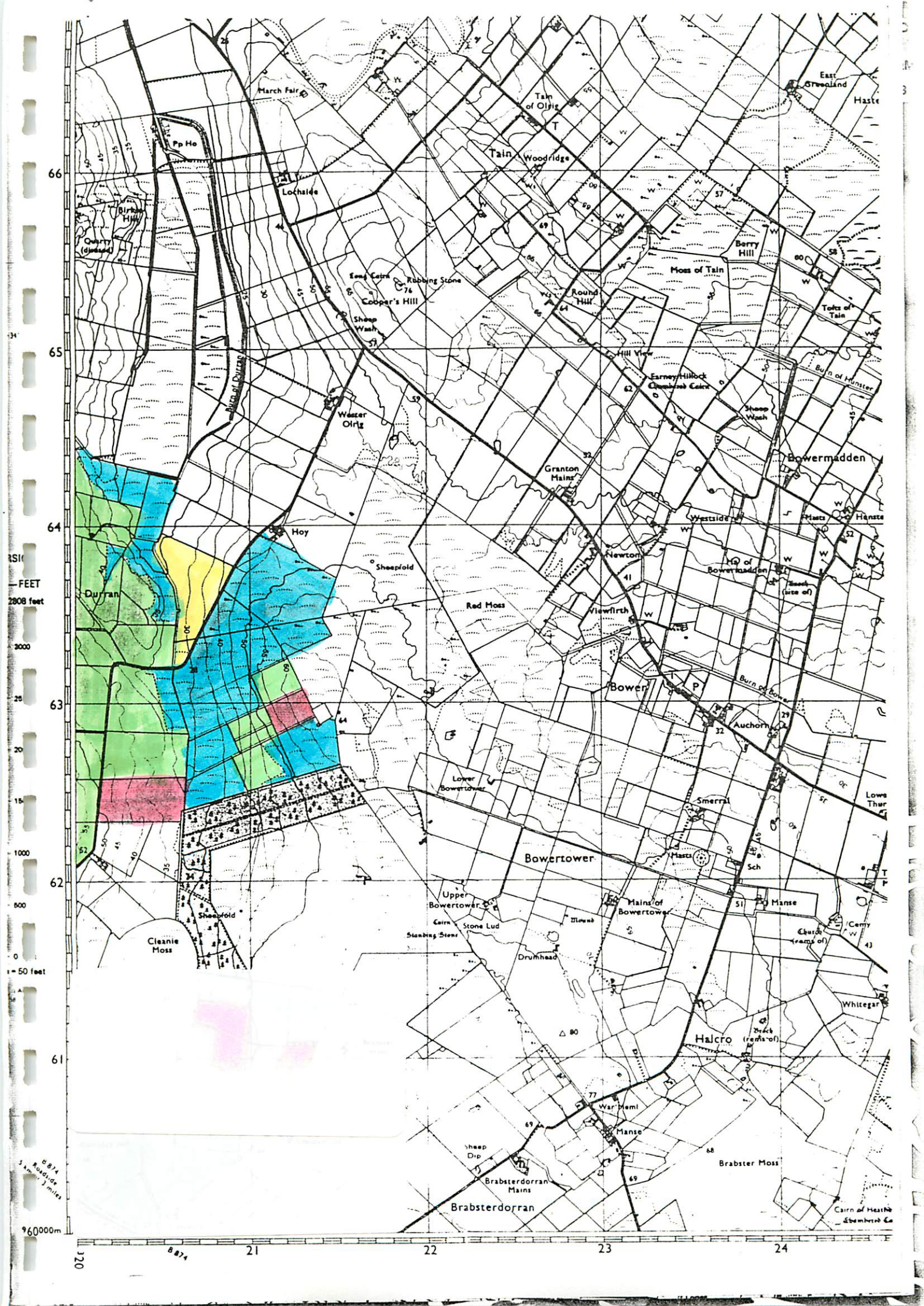
Toftinghall was visited on 8-10 February and 24, 28 and 31 March when no birds were seen. On 31 March, the glen south and west of Watten was searched for geese up along Scouthal Burn (39/232524) as far as Shielton (39/206509) without finding any. There is abundant reseeded and improved pasture along this burn which is rarely visited and may be suitable for White fronts.

3f Durran Mains Area 39/203638, 39/208630

Rough pasture and reseed with some arable agriculture, with areas of stubble. Generally used in the first part of the winter; no geese were seen in this area during visits in February and March 1985.

Numbers

1978/79: 15/04: c 50
1979/80: 17/02: 67; 24/02: c 75; 09/03: "flock present";
16/03: 76
1980/81: 11/11: 50 on stubble at Tister (39/203617)
1981/82: 28/03: 74
1982/83: 04/01: 80; 09/01: 27



66
65
64
63
62
61

RSI
FEET
2808 feet
3000
25
20
15
1000
500
0
50 feet

0.874
Roadside
3.4 miles

960000m

20

21

22

23

24

March Fair

Tain of Olgie

East Steeland
Haste

Tain Woodridge

Lochalde

East Cairn
Ribbon Stone
Cooper's Hill

Round Hill

Moss of Tain

Berry Hill

Wester Olig

Hill View

Earny Hill
Chamberlain Cairn

Bowermadden

Durran

Hoy

Granton Mains

Westside

2808 feet

Sheepfold

Red Moss

Viewfirth

Newton

63

Bower

Auchorn

62

Lower Bowertower

Bowertower

Smerral

50 feet

Upper Bowertower

Mains of Bowertower

Manse

61

Cleanie Moss

Stinking Stone

Stone Lud

Drumhead

Church (rems of)

Cemety

Sheep Dip

Brabsterdorrans Mains

War Dam

Manse

Brabster Moss

Whitegar

Cairn of Heath

Ebembred Ca

3g Corsback Hill - Camster 39/205612

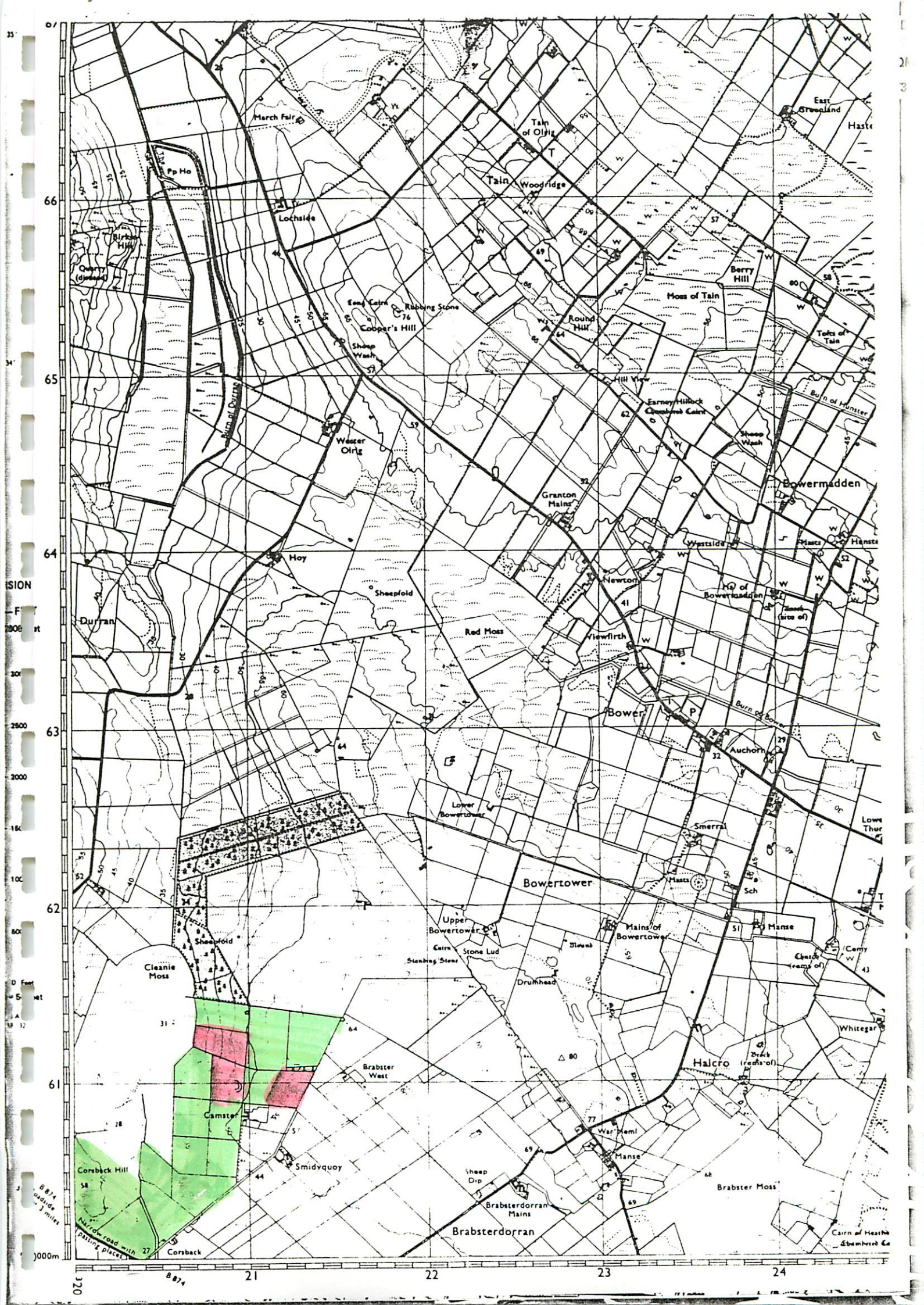
Permanent reseeded pasture with some cereal production, some areas pasture ploughed in January 1985 which may have made the site less attractive.

Numbers

1974/75: 16/03: 92
1983/84: 06/11: 78
1984/85: 11/11: c 58; 18/11: 30; 13/01: 71; 25/03: 83;
27/03: 80

Census

While no birds were noted from this area during the February visit, 83 (25 March) and 80 (27 March) were present in fields immediately north of Camster Farm at 39/210608 on both dates; the flock were later seen to fly down to Loch Scarmclate to roost at dusk.



4a Moss of Killimster and Loch of Winless SSSI 39/300555

An area of species-rich lowland blanket mire with well developed surface patterning. The well developed pool and hummock vegetation would potentially attract feeding Greenland White fronts, which have been seen on the adjacent Loch of Winless which is base-rich swamp fen and wet meadow as well as open stretches of water. There are reseeded fields adjacent to the loch which have also held geese in the past.

Numbers

1974/75: 10/04: 95
1982/83: 21/11: 53
1984/85: 27/03: 37; 28/03: 40; 30/03: 40 (including family of 3 j);
31/03: 45; 01/04: c 40.

Darvics

Not checked

Roost

Loch of Killimster

Census

The census was able to show that the 40 or so birds seen here and at the next site are, at least in March 1985, a discrete flock of White fronts, feeding and roosting in isolation from the adjacent flocks. Thirty-seven (27 March) and 40 (28 March) geese were found feeding on reseeded pasture at 39/317543 and on the evening of the latter date, they were watched flighting to Loch of Killimster to roost. Early on in the morning of 30 March, a pre-dawn visit to the loch found the birds still on the water, frozen into the thin ice of the site. The following evening flight comprised 45 birds going to roost, the birds having fed by day in the same fields. It seems likely that the area of patterned blanket mire in this area may also form a peatland feeding area during the winter for this group of birds.

Loch of Wester is a shallow mesotrophic loch impounded by the development of Keiss Links sand dune system. The site is highly base-rich and is surrounded by rough pasture and reseed, with large areas of peatland inland in the valley bottom. Geese and whooper swans use the pasture for grazing adjacent to the loch, but could possibly use the peatland area behind and to the north of the loch. Peatland Callunetum is being planted up and hence may have been disturbed. Birds have also been seen on pasture and stubble south of the loch along the gentle ridge by Westerloch. The site is used irregularly but the fact that a consistent forty or so Greenland White fronts appear may suggest they are discrete and separate from the Heilen group. It could be that this small flock spends time on the extensive mire areas to the north, Killimster and up the Burn of Lyth. As with many other sites, daily feeding of ewes may disperse birds away from fields to more remote feeding areas, not visible from the roads.

Drainage and Agricultural Change

Oil related industry in the form of a rail track is causing some disturbance on the south side of the loch. The track carries lengths of continuous welded pipe for undersea pipelines and has been built in the last five years or so. Disturbance is intermittent and related to workload. There has been much planting of conifers upstream from the loch which may have affected the moorland to the north-west.

Disturbance

The farmer on the north side of the loch at Aukhorn applied to NCC and received a permit to "disturb" geese up to 14 April 1983. These are predominantly passage greylags but will doubtless affect Greenland White fronts.

Numbers

1973/74: 14/11: c 40
 1982/83: 03/04: 47
 1983/84: 13/11: 41; 19/11: 41; 03/04: 47
 1984/85: 08/01: c 40; 14/04: 40

Darvics

No records

Roost

The geese flight onto the loch from the lochside fields which are the main feeding area if disturbed. They may use this loch as a roost site, and there appears to be much potential for moorland/bog feeding around here. These birds presumably are from the Killimster flock, and hence the main roost is likely to be Loch of Killimster.

Loch Meadie - Loch a'Cherigal 39/095487

This area has held White fronts since the end of the last century, since Harvey-Brown and Buckley (1887) found that the keeper at Strathmore bred pinioned birds bred from slightly wounded birds shot on the Flows about the Lodge. This was a roost site throughout the 1970s, since twice daily flights occurred between the Loch Meadie area and Loch Heilen, with geese passing north-east in the morning, south-west in the evening. Investigation proved them to be roosting on Loch Meadie, and following a morning flight clearly showed they were flying for the Loch Heilen area. This roost flight ceased as winters progressed, presumably as a result of increasingly severe weather and frozen inland lochs. In recent years this flight has not been noted with any regularity, although 36 flew over on this flight line south-west on 21 October 1984.

Drainage and Agricultural Change

The western flank of Loch Meadie has been afforested, and further west, extensive areas of patterned blanket mire have been planted up.

Numbers (Flights over Harpsdale/Dale Farm area)

1973/74: 30/10: c 60 SW, 17.20; 14/11: several SW, 18.00; 25/12: c 60 SW, 18.00; 23/01: 18 NE, 08.00
 1974/75: 08/10: 16 NE, 08.15; 18/10: 24 SW 18.00; 01/11: c 80 SW, 17.50; 02/11: 38 SW, 16.30; 05/11: 85 NE, 08.30; 15/11: 60+ NE, 08.05; 16/11: 53 SW, 16.30 and 36 SW, 16.50; 08/04: 60 SW, 20.15; 13/04: 130-150 SW flying towards Loch Meadie, where they were later discovered at the north end.
 1975/76: 08/10: 25 SSW, 18.30; 21/10: c 100 SW, 18.10; 10/11: 112-115 SW, 16.45; 24/11: 60-70 SW, 16.25
 1976/77: 14/11: c 30 SW, 16.15
 1977/78: 13/10: 8, Dale; 05/11: 80 SW, 16.15; 27/11: 45 NE, 08.15 followed as far as Odrig flying towards Loch Heilen; 12/12: c 80 SW, 15.00
 1978/79: 10/12: c 80 Dale
 1979/80: 20/10: c 30 Dale; 04/11: 10, Dale; 08/11: 66 NE, 07.30; 10/11: 54 NE, 07.50; 11/11: 3, Dale; 22/11: 21, Dale; 09/12: 42, Dale
 1980/81: 13/10: 17, Dale
 1982/83: 23/10: 38SW, 18.00; 11/01: calling over SW, 17.20
 1983/84: 27/11: 10 flew off north-east from the loch at dawn
 1984/85: 21/10: 36 SW, 18.20

Census

The flowland area and the sightings of geese from this area offered the most tantalising challenge to the census of Greenland White fronts. The whole of south-western Caithness is covered by patterned mire very similar to parts of County Mayo in western Ireland and is traditional feeding habitat of the White front in western Britain. None were ever seen during the day at Meadie on several visits there but c 60 flew in after dusk on the evening of 27 March when watched flighting in from the north-east to settle on Loch Meadie. A dawn watch the following morning produced nothing although hampered by bad weather. An organised watch on the night of the 29th proved fruitless before darkness fell:

SUMMARY OF CAITHNESS GREENLAND WHITE FRONTED GOOSE COUNTS

Literature References

Ruttledge and Ogilvie (1979): mean annual peak c 500

Atkinson - Willes (1963): map only, shows peak 10-100

The following table contains a synthesis of published and unpublished counts; numbers are not necessarily comparable, since most are maximum unco-ordinated counts, and since new feeding areas have been found and included from recent years, this further invalidates comparisons over several years.

	Loch Calder & Broubster	Lochs Scarmclate Watten & Winless	Loch Heilen	Other Areas	Total Counts
1962-3	10		19		29
1963-4	6				6
1965-6	48				48
1966-7	60		150	12	222
1967-8	100	140	260		500
1968-9	115				115
1969-70	152	150	60		362
1970-1	128		150		278
1971-2	190	150	280		620
1972-3	200		150		350
1973-4	90		615	30	735
1974-5	100	120	350		570
1975-6	230	90	50		370
1976-7	200		300	50	550
1977-8	315	85	240	90	730
1978-9	370	80	190		640
1979-80	240	80	40		360
1980-1	220		180	50	450
1981-2	180	77	42		299
1982-3	246	77	160	152	635
1983-4	140	67	120	41	368
1984-5	124	129 + 104	2	c 60	419

GREENLAND WHITE FRONTED GOOSE STUDY

CAITHNESS CENSUS SPRING 1985

SUMMARY TABLE

	8.2.85	9.2.85	10.2.85	24.3.85	25.3.85	26.3.85	27.3.85	28.3.85	29.3.85	30.3.85	31.3.85	1.4.85
Broubster Leans	-	0	-	-	-	-	-	-	0	-	-	-
Assery/Achaeter	-	0	-	-	-	-	-	-	0	-	-	-
Lythmore Strath	-	123	-	-	-	-	-	-	0	-	-	-
Stemster	-	0	-	-	-	-	-	-	0	-	-	-
Bardnaheigh	-	0	-	-	-	-	-	-	0	-	-	-
Hallam	-	0	-	-	-	-	-	-	124	119	-	-
Baltimore	-	0	-	-	-	-	-	-	0	-	-	-
Loch Heilen	2	0	0	-	c50	0	0	0	0	0	-	-
Schoolary	-	0	0	-	-	0	0	-	-	0	-	-
Phillip's Mains	-	-	-	-	-	0	-	-	-	-	-	-
Hollandmey	-	-	-	-	-	0	-	-	-	-	-	-
Syster	-	0	0	-	-	110	95+	-	0	0	-	-
Loch of Mey	0	0	104	-	-	0	-	-	*93+	*c110	*c100	-
Charleston	0	0	104	-	50	0	0	-	0	0	-	-
Rattar	-	-	104	-	50	0	0	-	0	0	-	-
St John's Loch	-	-	-	-	-	0	-	-	0	0	-	-
Blackpark, Lyth	0	0	-	-	0	-	-	-	-	0	0	-
Loch Scarmclate	0	129	c80	-	*83	-	*80	2	0	0	80	-
Loch Watten	0	0	-	-	0	-	0	0	2	0	-	-
Knockglass	-	0	0	-	0	-	0	-	-	0	-	-
Houstry/Backlass	-	0	0	0	-	-	-	-	-	0	-	-
Loch of Toftinghall	-	0	0	?	-	-	-	0	-	-	-	-
Lochquoy/Hoy	-	0	-	-	0	-	0	-	-	0	-	-
Corsback Hill/Camster	0	0	0	-	83	-	80	-	78	78	-	-
Winless	0	0	0	-	-	-	37	40	0	0	35-40	c40
Loch of Wester	0	0	0	-	0	0	0?	-	0	0	0	0
Westerloch	0	0	0	-	0	-	0	-	0	0	0	0
Loch of Winless	0	0	0	0	0	0	0	0	0	0	0	0
Loch of Killimster	-	-	-	-	0	-	0?	*40	0	*40	*40	0
Hill of Stroupster	-	-	-	-	-	0	-	-	-	-	-	-
Loch Meadie	-	0	-	0	-	-	*c60	-	0	*40+	*12	*39
Loch a'Cherigal	-	0	-	-	-	-	0	-	0?	0	0	0

Key

- = not counted
- 0 = counted but no geese present
- * = roost count
- (= indicates flock movement witnessed to roost site

References

- ATKINSON-WILLES, G L (Ed) (1963). Wildfowl in Great Britain. London; Nature Conservancy Monograph 3.
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Caithness Survey Budget

INCOME	Nature Conservancy Council	£200.00
	Royal Society for the Protection of Birds	150.00
	Wildfowl Trust	<u>100.00</u>
		£450.00
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EXPENDITURE	Hire of Cottage for Two Weeks	£80.00
	Petrol Expenses	265.00
	Purchase of Maps	12.55
	Car Hire	<u>88.85</u>
		£446.40
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