

unterstrichene von mindestens 10 cm².

(Angaben über Untersuchungsflächen)

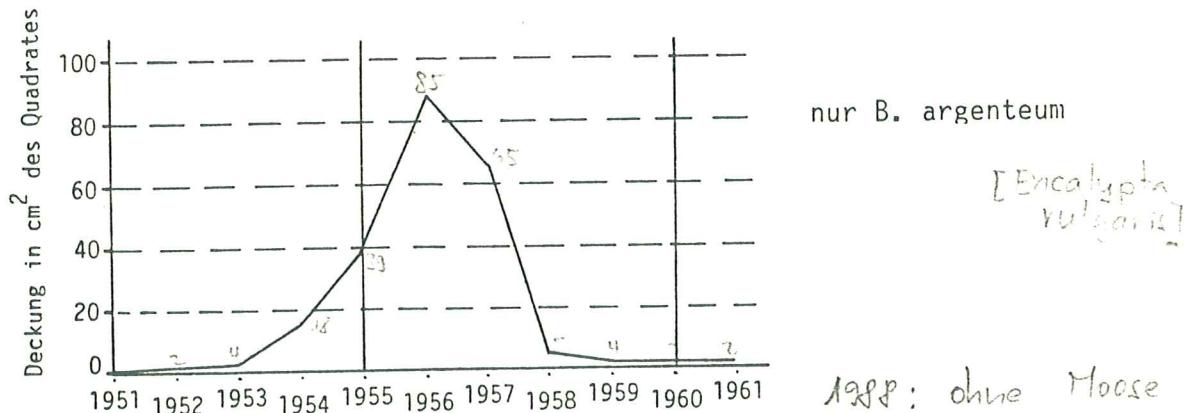
| | | | | | | | | | |
|------|----|----|----|------|------|----|----|----|----|
| 1953 | F1 | F2 | F3 | (F4) | (F5) | F6 | F7 | F8 | F9 |
| 1961 | F1 | F2 | F3 | | | F6 | F7 | F8 | F9 |

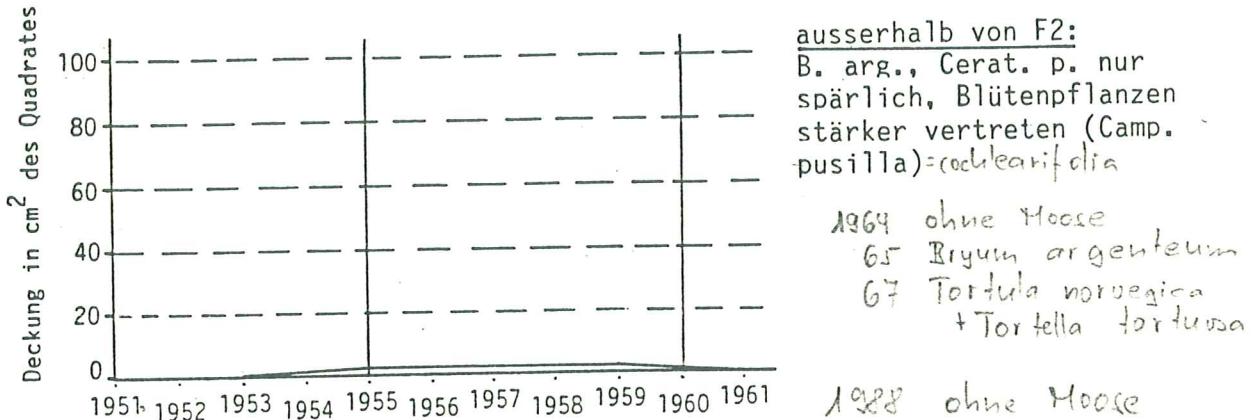
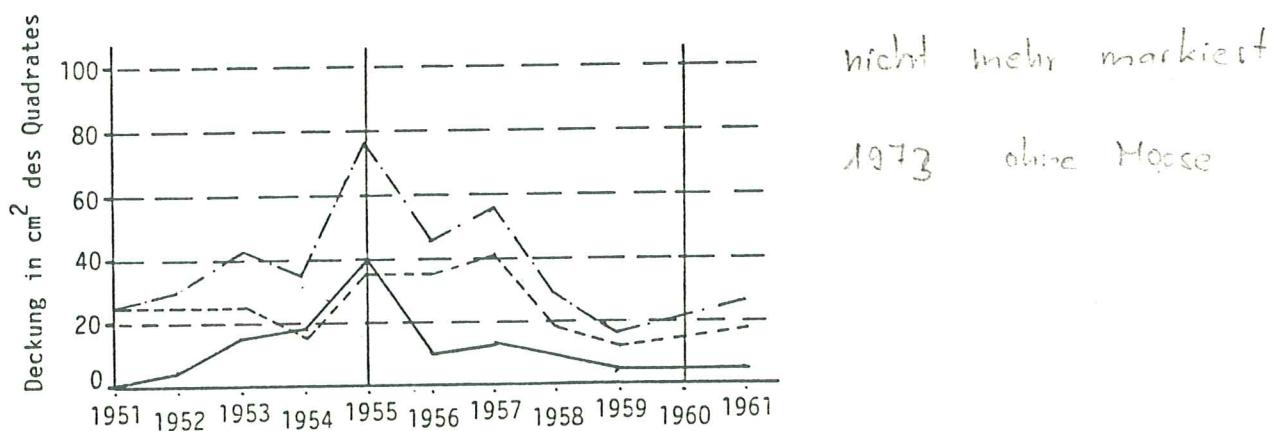
Charakterisierung der Flächen

Beginn der Besiedlung in der rechten oberen Ecke, Ausbreitung nach unten und nach links. Inwieweit die Blütenpflanzen (*Euphorbia cyparissias*, *Senecio vulgaris*, *Campanula pusilla*) die Moosbesiedlung beeinflussen, konnten wir nicht feststellen. Wenn sich ein Einfluss geltend machte, war er sicherlich nur klein (Zusammenhang mit Kaligehalt und Auswaschung).

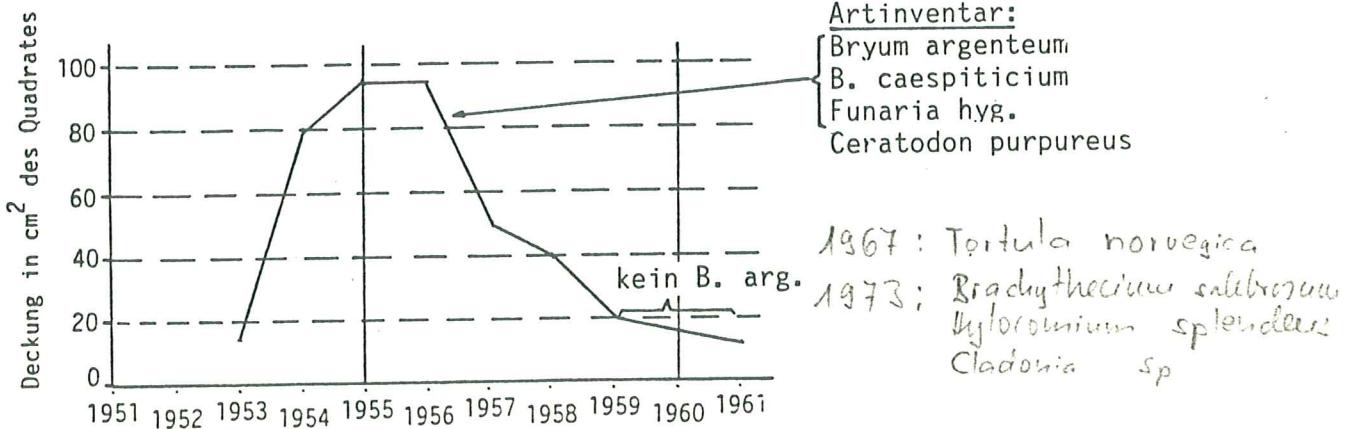
F1 – F3, F6 – F9: Besiedlungsverlauf

F1: Bryum argenteum



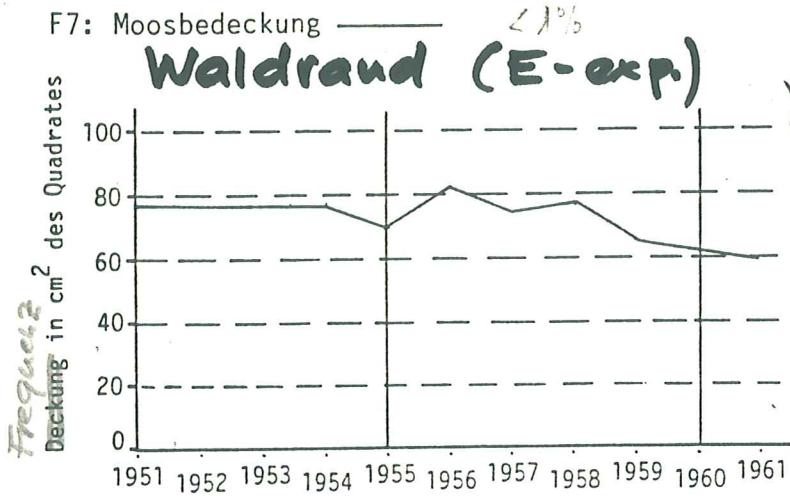
F2: *Bryum argenteum* (2030 m)F3: *Bryum argenteum* —, *Tortella tortuosa* ----, Moosbedeckung - - -

F6: Moosbedeckung — < 1%



1988 8 *Brachythecium salicinum*
2 *Eucalypta vulgaris*
5 *Tortella tortuosa*

Besiedlungsverlauf Moose (F. OCHSNER, P. GEISSLER)



Artinventar:

- ✓ *Hylocomium splendens*
- ✓ *Brachythecium salebrosum*
- Dicranum scoparium*
- ✓ *Tortella tortuosa*
- Pleurozium schreberi*
- Heterocladium dimorphum*

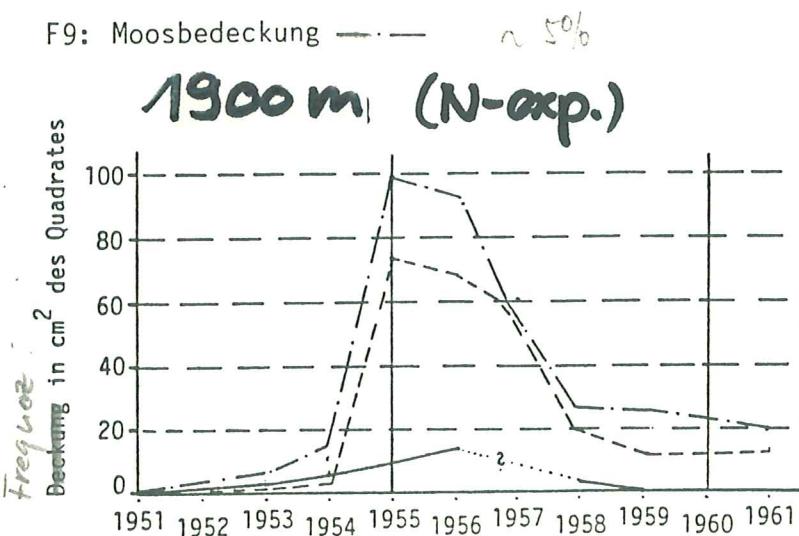
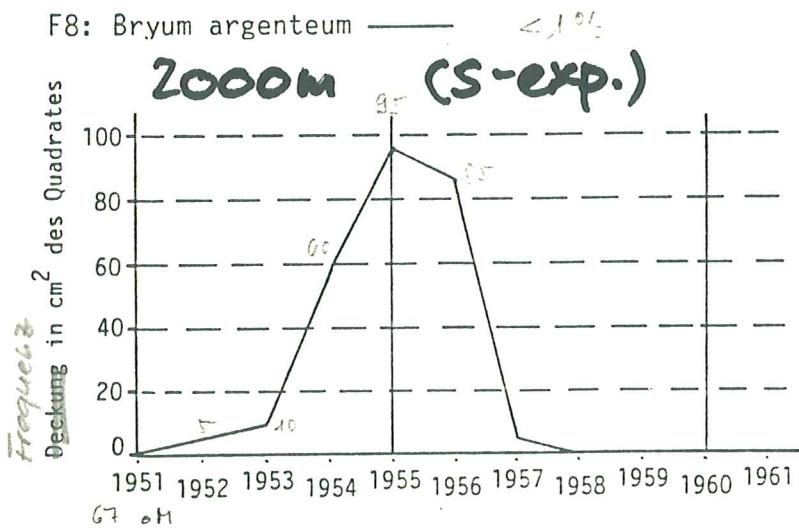
Cetraria islandica
C. rangiferina
Cladonia pyxidata
C. fimbriata
C. deformis

1964: ohne Moose

1964: *Tortella tortuosa*, *Dicranum scoparium*, *Brachythecium salebrosum*, *Heterocladium dimorphum*

1988: *Eukalyptus* *guttaefera* 4
 Artinventar: *Bryum argenteum* ✓
Bryum argenteum
Ceratodon purpureus x

1988: keine Moose



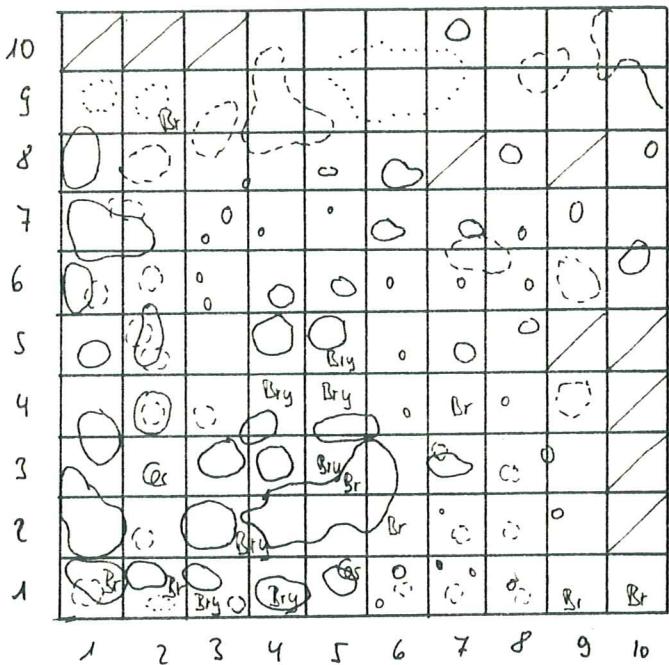
Artinventar:

- ✓ *Bryum caespiticium* --- ✓
- ✓ *Barbula convoluta* o ✓
- ✓ *Dicranum scoparium* o ✓
- ✓ *Racomitrium canescens* o ✓
- *Pleurozium schreberi*
- ✓ *Tortella tortuosa*
- *Hylocomium splendens*
- ✓ *Rhytidiodelphus triquetrus*
- *Drepanocladus uncinatus*
- *Ceratodon purpureus*
- ✓ *Pohlia cruda*
- *Bryum argenteum* —

1967: *Bryum* sp.
Brachythecium sp.
Phodobryum roseum

1988: cf. Beilage

f₄



○ 6d *Tortella tortuosa*

8 *Bryum caespiticium*

8 *Brachythecium salebinum*

2 *Ceratodon purpureus*

(;) 36 *Cladonia simbiata*

+ *Cl. canis*

Cl. pocillum

(;) 9 *Peltigera rufescens*

75

| | Br | | | | | Bry | . | . | CP |
|----|----|----|---|---|------|-----|----|----|----|
| 10 | Q | | | | | | | | |
| 9 | Br | o | | o | Br o | o | Q | o | o |
| 8 | o | o | o | o | | | o | o | o |
| 7 | Q | o | o | | | o | o | o | o |
| 6 | | | o | o | | o | o | o | o |
| 5 | | o | | o | o | o | Q | o | o |
| 4 | Br | T | o | o | o | o | o | o | o |
| 3 | o | Th | o | o | o | o | Br | Cl | Th |
| 2 | o | o | o | o | o | o | o | Br | o |
| 1 | o | o | o | o | o | o | o | o | Q |

Cladonia fimbriata
Primaria thalli

874 *Tortella tortuosa*

Tortella tortuosa

8 *Brachythecium salebrosum* *Brachythecium salebrosum*

3 *Thuidium abietinum* *Thuidium abietinum*

1 *Bryum caespiticium* *Bryum caespiticium*

1 *Tortula norvegica* *Tortula norvegica*

4 *Cladonia fimbriata*

Cladonia fimbriata

75

| | Br | | | | | | By | • | ◦ | ◦ |
|----|----|----|----|---|----|---|----|----|---|----|
| 10 | ○ | | | | | | | ○ | ◦ | ◦ |
| 9 | Br | ○ | | ○ | Br | ◦ | | Cl | ○ | ○ |
| 8 | ○ | ◦ | ◦ | ○ | | | | ◦ | ◦ | ◦ |
| 7 | ○ | ◦ | ◦ | | | ◦ | ◦ | ◦ | ◦ | ◦ |
| 6 | | | ◦ | ◦ | | | ◦ | ◦ | ◦ | ◦ |
| 5 | ◦ | Br | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 4 | ◦ | To | Br | | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 3 | ◦ | Th | | ◦ | Cl | ◦ | ◦ | Th | ◦ | Th |
| 2 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |
| 1 | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ | ◦ |

Cladonia fimbriata
Primärthalli;

874 Tortella tortuosa

8 Brachythecium salebrosum

3 Thuidium alieninum

1 Bryum caespiticium

1 Tortula norvegica

4 Cladonia fimbriata

F₆

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|----|---|----|---|--|--|----|----|----|----|
| 10 | | | | | | | | O | Eh |
| 9 | | | | | | | | Br | Br |
| 8 | | | | | | | | Br | |
| 7 | | Br | | | | Br | Br | | |
| 6 | | | | | | | | | |
| 5 | | | O | | | | | | |
| 4 | | O | | | | | | | |
| 3 | O | Br | | | | | Br | O | |
| 2 | | | | | | | | | |
| 1 | | | | | | | | | |

1 2 3 4 5 6 7 8 9 10

0 5 *Tortella intricata*

Tortella tortuosa

2 *Encalypta vulgaris*

Encalypta vulgaris

8 *Brachythecium salebrosum*

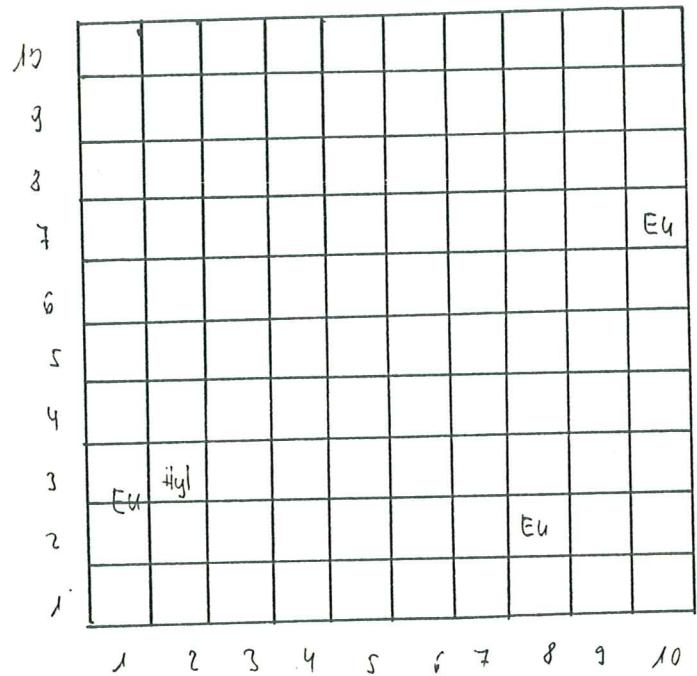
Brachythecium salebrosum

T₆

| | | | | | | | | | |
|----|---|---|----|---|---|---|----|----|------|
| 10 | | | | | | | | O | Eh |
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| 8 | | | | | | | | Br | |
| 7 | | | Br | | | | Br | Br | |
| 6 | | | | | | | | | |
| 5 | | | | O | | | | | |
| 4 | | | | O | | | | | |
| 3 | | O | Br | | | | Br | O | |
| 2 | | | | | | | | | |
| 1 | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 10 |

- 5 *Tortella imbricata*
2 *Encalypta vulgaris*
8 *Brachythecium salebrosum*

T₄



4 Eurhynchium pulchellum Eurhynchium pulchellum
1 Hylocomium splendens Hylocomium splendens

77

| | | | | | | | | | |
|----|---|---|---|---|---|---|---|---|----|
| | | | | | | | | | |
| 10 | | | | | | | | | |
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| 5 | | | | | | | | | |
| 4 | | | | | | | | | |
| 3 | | | | | | | | | |
| 2 | | | | | | | | | |
| 1 | | | | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | | | | | | | | | 10 |

4 *Eurychneum pulchellum*

1 *Hylaeomium splendens*

T9

| | | | | | | | | | | | | | |
|----|---------|----|---------------|---------------|----------|---------|---|---------|---|----|---|--|--------------------------|
| | | | | | | | | | | | | | - <i>Cladonia canina</i> |
| 10 | Br o | Di | Ped o | Dio o | Br | / | Q | Di | o | o | o | | |
| 9 | Br y | o | Q | o | Di o | Di o | o | Br y | | | | | |
| 8 | C Br | o | o | | | | | | | | | | |
| 7 | o | o | o | o | | | o | o | | | | | |
| 6 | o | o | Br | o | o | | | | | | | | |
| 5 | o | o | | o | | | | | o | o | | | |
| 4 | o | o | o | He | | | | o | | o | | | |
| 3 | Br o | o | o | o | Br i | Di o | o | po | | | | | |
| 2 | | | o | o | Br ec | | | | | | | | |
| 1 | Di | | Brec po Br | Brec te Br | po o | Q | Q | | | | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | |

○ 52 *Tortella tortuosa*

Tortella tortuosa

8 *Brachythecium salebrosum*

Brachythecium salebrosum

8 *Br. velutinum*

B. velutinum

8 *Dicranum scoparium*

Dicranum scoparium

4 *Pohlia nutans*

Pohlia nutans

3 *Bryum caespiticium*

Bryum caespiticium

3 *Bryoerythrophyllum recurvirostre*

Bryoerythrophyllum recurvirostre

1 *Heterocladium dimorphum*

Heterocladium dimorphum

○ 28 *Cladonia fimbriata*

Cladonia fimbriata

1 *C. cariosa*

C. cariosa

2 *Peltigera rufescens*

Peltigera rufescens

Tg

| | Br | Di | Po | Br | Di | Br | Q | Di | O | O | Cladonia canina |
|----|-----|----|-----|-----|----|----|-----|----|---|----|-----------------|
| 10 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | |
| 9 | Bry | ○ | ○ | ○ | ○ | ○ | Bry | | | | |
| 8 | Br | ○ | ○ | | | | | | | | |
| 7 | ○ | ○ | ○ | ○ | ○ | ○ | ○ | | | | |
| 6 | ○ | ○ | Br | ○ | ○ | | | | | | |
| 5 | ○ | ○ | | ○ | | | ○ | | ○ | ○ | |
| 4 | ○ | ○ | ○ | ○ | He | | ○ | ○ | ○ | | |
| 3 | Br | ○ | ○ | ○ | Br | Br | Br | Br | | | |
| 2 | | | ○ | ○ | Br | Br | | | | | |
| 1 | Di | | Bry | Bry | Po | Br | Q | Q | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | |

○ 52 Tortella tortuosa

8 Bryum salicinum

Br. velutinum

8 Dicranum scoparium

4 Pohlia nutans

3 Bryum caespiticium

3 Bryoscyphophyllum recurvirostre

1 Leucodonium dimorphum

○ 28 Cladonia jimbriata

1 C. caniosa

2 Peltigera ulvescens