

SHEFFIELD BOTANICAL GARDENS



FRIENDS OF BOTANICAL GARDENS SHEFFIELD

ORNAMENTAL
GRASSES

1991

FRIENDS OF THE BOTANICAL GARDENS, SHEFFIELD

ORNAMENTAL GRASSES

Introduction

Recent years have seen the development of great interest in the true ornamental grasses and in plants of similar habit; the latter include the sedges (*Carex*), the wood rushes (*Luzula*) and sundry ornamentals with grass-like foliage such as *Ophiopogon* and *Liriope* (Liliaceae), and *Acorus* (Araceae). In May, 1990, therefore, a representative collection of these plants was established in Sheffield's Botanical Gardens, and these notes try to briefly describe that collection and to outline appropriate cultural details.

Design uses

As a group, these plants are characterised by a strong linear form, often marvellously graceful. Their foliage offers a wide variety of textures, and many colours from yellow in *Milium effusum* 'Aureum' (Bowles' Golden Grass) to silver-blue in the Blue Fescue. There is now available a much wider range of blue, variegated and golden leaved grasses than formerly.

Apart from their obvious use in lawns, grasses can be used almost anywhere else in the garden. They can be planted in mixed borders, as dramatic focal points and lawn specimens, for ground cover and edges of borders, in heath gardens, as patio specimens, permanent or temporary screens, and as pond marginals. They are remarkably trouble free, and can be planted with some confidence that they will survive beautifully for many years. Some species such as *Stipa gigantea* also produce excellent material for floral artists, as their dried flower heads are beautiful and long lasting. The table on the central pages summarises the various uses of the recommended grasses. It was thought appropriate to include the grass-like plants here, as they are used in the same ways as the true grasses. Thus, the black-leaved *Ophiopogon planiscapus* 'Nigrescens' makes excellent evergreen ground cover, especially effective with grey and silver leaved plants. Being evergreen it does not

need trimming, although the old dead leaves can be removed when they become too untidy. The various sedges (*Carex*) give evergreen effects in a variety of situations - mostly damp (although *Carex pendula* will tolerate severe dry shade).

Cultivation

Most grasses thrive in an open site, with moderately fertile soil, and tolerate a wide range of pH. A few species grow in water as marginals, or in wet sites. Too rich soil, or too much added fertiliser can produce excessive growth which falls over (lodges) in wet and windy weather.

Planting of perennials is best done in the spring, as growth commences. Groups of, say, three or five plants at 6 - 9" spacings are needed for the small, tuft forming plants which are mainly used for ground cover and border edges. The more invasive spreading types need thought in their siting, as they can obliterate other less robust plants. It may be possible to limit their growth by giving them poor soils or poor conditions - e.g. shady or very dry sites. The perennials need regular division, with the frequency determined by their habit and rate of growth. Splitting should be in the spring, as autumn or winter disturbance can lead to losses, especially of the smaller or more tender species. Thus, the tussock-forming species (e.g. *Festuca*) can start to show bare patches after two to three years and should be divided and replanted then; the same applies to new cultivars with limited stock. Medium growing species such as *Helictotrichon* and *Molinia* can be divided every three to five years, and large species such as *Miscanthus sinensis* every seven to ten years. Very invasive grasses such as *Phalaris arundinacea* should be divided as soon as, or before, they show signs of taking over the whole border. The lovely Pampas Grass is usually left undisturbed, making a bigger and better focus point as the years pass; the Bamboos (shrubby grasses) also rarely need splitting, and are usually allowed to spread into large dense clumps.

Established plants of most of the grasses are quite drought tolerant, (although *Deschampsia caespitosa* on a thin clay soil suffered in the 1990 drought) but in common with all other new plantings, they need watering in their first year, if drought conditions develop. Mulching

with two to three inches of gravel or bark chippings in early summer after planting also helps establishment, (and helps to control weeds).

Trimming

Most of the grasses are best trimmed in March to April time, when new growth is just starting. If desperate to keep a tidy garden the proud owner can trim them in the winter, although the season's thatch of dead leaves and stems does give some winter protection to the plants. The low growing grass *Holcus mollis* '*Albo-variegatus*' (a useful ground cover grass, even for dry shade,) can produce a great deal of thatch, especially in very dry sites; this needs heavy trimming in the spring. *Holcus* spreads quickly, and should probably be reduced to reasonable proportions at the same time. The softer growing tall grasses, such as *Phalaris* (Gardener's Garters) become tatty after the winter gales, and can either be trimmed in the winter when very broken down, or left until the spring. Alternatively, the shoots can be cut over in September to provide new growths from the base, which give welcome fresh autumn colour. But plants such as the elegant *Stipa arundinacea* and *Carex comans* 'Brown Form' are outstandingly beautiful in the winter, with their bronzy evergreen foliage, and do not need to be completely cut back; in the spring the oldest growths can be thinned out. The taller grasses with weather-proof flower heads can give lovely architectural effects in the winter, especially when frosted, and are best cut back in the spring. For example, the flower heads of Pampas Grass will survive the winter if in a sheltered place and the plants should then be cut hard back in early spring (using strong gloves, as the leaves have tiny cutting barbs all along their edges). Large Pampas specimens can also be burnt in early spring, to get rid of unruly masses of barbed dead material; this is rather drastic, and is not recommended on environmental grounds; apart from possibly killing the plant, burning will of course destroy overwintering insects and animals, especially hedgehogs.

Annual grasses are best harvested in the summer, when the flowers are still green. If they are left until straw coloured, they disintegrate on cutting, and cannot be used in arrangements, or dried, or the seed collected and stored for the following year. *Briza maxima* is particularly awkward in this respect; the new seedlings overwinter as

very small plants, and it can become a serious (though beautiful) weed in the borders.

The grasses and allies are remarkably free of pests and diseases. Slugs and snails seem to leave them alone. A few may be affected by rust diseases in hot summers, but are not as disfigured as, say, *Hypericum*s and *Hollyhock*s when these are attacked by their specific rusts.

Species established in a display bed in Sheffield's Botanical Gardens, as of February, 1991.

(For location see Map of Gardens, end of booklet, No. 14a).

Acorus gramineus 'Variegatus' - white-variegated lvs.
Alopecurus pratensis 'Aurea' - brilliant, yellow-striped lvs.
Arundinaria murielae - graceful, medium-sized bamboo.
Arundinaria vagans - small bamboo for ground cover.
Arundinaria viridistriata - yellow-variegated bamboo.
Briza maxima - annual; fls. like lockets - green, then straw coloured.
Briza minima - small annual; fls. like tiny lockets.

Carex atrata - glaucous green lvs., black flower spikes.
Carex buchananii - bright, reddish brown lvs.
Carex comans 'Bronze Form' - hair-like, dull brown lvs.
Carex elata 'Aurea' - "Bowles' Golden Sedge" - golden striped lvs.
Wet sites.

Carex morrowii 'Variegata' - small sedge; white and green lvs.
Carex morrowii 'Fisher's Form' - medium sedge; green lvs.
Carex ornithopoda 'Variegata' - tiny sedge; white and green lvs.
Carex oshimensis 'Evergold' - small; golden, cream and green lvs.
Carex pendula - large native sedge for shade - wet or dry.
Carex petriei - reddish bronze lvs. Arching flower spikes.
Cortaderia selloana - "Pampas Grass". Cream or pink plumes - specimen plantings. Select suitable cultivars for size of site.
Cyperus eragrostis - green lvs., umbrella of fls.

Dactylis glomerata 'Variegata' - lvs. striped green and white.
Deschampsia caespitosa 'Bronze Veil' - dainty straw-yellow fls.

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- Elymus magellanicus* (Syn. *Agropyron magellanicus*) - bright blue lvs. and fls. Recent introduction.
- Elymus arenarius* - broad, blue-grey lvs. Invasive.
- Festuca glacialis* - small, icy blue-green tufted grass.
- Festuca eskia* - brilliant green, soft-leaved carpeter.
- Festuca glauca* - small, blue-leaved tufted grass.
- Glyceria maxima* 'Variegata' - Creamy striped lvs. Wet sites or water.
- Hakonechloa macra* 'Albo-aurea' - brilliant, yellow-striped lvs. Choice plant ideal for patios and associating with bonsai.
- Helictotrichon sempervirens* (Syn. *Avena candida*) - narrow, blue-grey lvs., grey fls.
- Holcus mollis* 'Albo-variegatus' - small, grey and white grass - spreading, and excellent ground cover.
- Hordeum jubatum* - annual, with barley-like flower spikes.
- Lagurus ovatus* - annual, with white downy flowers.
- Luzula sylvatica* 'Marginata' - "Woodrush". Green hairy lvs. white edged.
- Miscanthus nepalensis* - green lvs. strong growing.
- Miscanthus sacchariflorus* - tall, arching lvs. Vigorous. Screens.
- Miscanthus sinensis* 'Gracillimus' - narrow lvs.; dainty plant.
- Miscanthus sinensis* 'Purpurascens' - purplish bloom on stems and lvs.
- Miscanthus sinensis* 'Silver Feather' - arching stems of shimmering fls.
- Miscanthus sinensis* 'Variegatus' - lvs. striped yellow or white.
- Miscanthus sinensis* 'Zebrinus' - lvs. cross banded yellow.
- Milium effusum* 'Aureum' - Bowles' Golden Grass.
- Molinia coerulea* 'Variegata' - elegantly variegated; buff lvs. in winter.
- Molinia littoralis* - tall, with arching purplish flower sprays. Lovely autumn colour.
- Ophiopogon planiscapus* 'Nigrescens' - black-leaved "Grass Lily". Spikes of mauve flowers.

RECOMMENDED ORNAMENTAL G

NOTE - in the table, E = evergreen

| | Small - up to 45cms (1.5') | M |
|------------------------------|--|--|
| Foliage colour | | |
| Variegated white/ green | Acorus gramineus 'Variegatus' E Carex ornithopoda 'Variegata' E Holcus mollis 'Albo-variegatus' Ophiopogon jaburan 'Vittatus' E | Dact Luz Mo |
| Glaucous/blue/ silver | Carex atrata E Festuca glauca E | Elymus Avena |
| Golden and golden striped | Acorus gramineus 'Ogon' E Carex oshimensis 'Evergold' E Hakonechloa macra 'Albo-aurea' Miliun effusum 'Aureum' | Al Carex |
| Black/purple Bronze/red | Carex petriei E Ophiopogon planiscapus 'Nigrescens' E Uncinia uncinata E | Ca |
| Green | Festuca eskia E Festuca glacialis E | Care |
| Inflorescences | | |
| Hardy Annuals for Drying | Agrostis nebulosa (Cloud Grass) Briza maxima (Large Quaking Grass) Briza minor (Small Quaking Grass) | Bromu Hord La |
| Perennials | Luzula nivea (Hairy Wood Rush) E Pennisetum orientale Bouteloua gracilis (Mosquito Grass) | Cor Pennis Pennis Miscant |

GRASSES AND GRASS-LIKE PLANTS

| Medium - 45 - 90cms (1.5-3') | Large - 90cms upwards (over 3') |
|---|--|
| <p><i>Arundinaria variegata</i> <i>Stylos glomerata</i> 'Variegata' <i>Phalaris sylvatica</i> 'Marginata' E <i>Molinia coerulea</i> 'Variegata'</p> | <p><i>Miscanthus sinensis</i> 'Variegatus' <i>Phalaris arundinacea picta</i> and cvs. <i>Zea mais</i> 'Variegata' (Maize) HHA <i>Glyceria maxima</i> 'Variegata'</p> |
| <p><i>Agropyron</i> (syn. <i>Agropyron</i>) <i>magellanicus</i> <i>Helictotrichon candida</i> (syn. <i>Helictotrichon</i> <i>sempervirens</i>)</p> | <p><i>Elymus arenarius</i> E</p> |
| <p><i>Cortaderia pratensis</i> 'Aureus' <i>Cortaderia selkirkii</i> 'Aurea' (Bowles' Golden Sedge)</p> | <p><i>Arundinaria murielae</i> 'Viridistriata' E <i>Cortaderia selkirkii</i> 'Gold Band' E <i>Miscanthus sinensis</i> 'Zebrinus' <i>Spartina pectinata</i> 'Variegata'</p> |
| <p><i>Carex comans</i> 'Brown Form' E <i>Carex buehneri</i> E <i>Stipa arundinacea</i> E</p> | <p><i>Miscanthus sinensis</i> 'Purpureus' <i>Melica altissima</i> 'Atropurpurea'</p> |
| <p><i>Arundinaria vagans</i> E <i>Stipa morrowii</i> 'Fisher's Form' E</p> | <p><i>Miscanthus sacchariflorus</i> <i>Miscanthus sinensis</i> 'Gracillimus'</p> |
| <p><i>Briza macrostachya</i> (Brome Grass) <i>Stipa jubatum</i> (Squirrel Grass) <i>Stipa ovatus</i> (Hare's Tail)</p> | <p><i>Triticum spelta</i> (Wheat) <i>Phalaris canariensis</i> (Canary Grass)</p> |
| <p><i>Briza media</i> <i>Cortaderia selkirkii</i> 'Pumila' E <i>Stipa alopecuroides</i> 'Hameln' <i>Stipa alopecuroides</i> 'Woodside' <i>Cyperus eragrostis</i> <i>Stipa pennata</i> E <i>Chionochloa conspicua</i> E <i>Molinia sinensis</i> 'Yakushima Dwarf'</p> | <p><i>Cortaderia selkirkii</i> (Pampas Grass) E <i>Stipa gigantea</i> E <i>Arundo donax</i> (not hardy) <i>Miscanthus sinensis</i> 'Silver Feather' <i>Deschampsia caespitosa</i> - 'Bronze Veil' and 'Golden Dew' E <i>Carex pendula</i> E <i>Molinia littoralis</i> (Syn. <i>Molinia altissima</i>)</p> |

Pennisetum alopecuroides 'Hameln' - furry 'bottle brush' fls.
Pennisetum alopecuroides 'Woodside' - free flowering. Warm sites.
Pennisetum orientale - many pink 'poker spikes' of fls.
Phalaris arundinacea picta - striped "Gardener's Garters".
Invasive.
Phalaris arundinacea 'Green and White Form' - less invasive (just).
Spartina pectinata 'Variegata' - ribbon-like yellow striped lvs..
Stipa arundinacea - bronze evergreen lvs. Delicate fls. Winter
colour.
Stipa gigantea - 8' shining inflorescences. Evergreen lvs..
Uncinia uncinata - "Hook Sedge". Small; reddish bronze evergreen
lvs.

Refs. Ornamental Grasses. Grounds, R. Helm. 2nd edition.

Ornamental Grasses. Wisley Handbook No. 44.

Seeds: John Chambers Wild Flower Seeds, 15, Westleigh Road,
Barton Seagrave, Kettering Northants. NN15 5AJ.

Sandeman Seeds, Dried Flowers and Grasses, The Croft,
Sutton, Pulborough, West Sussex, RH20 1PL.

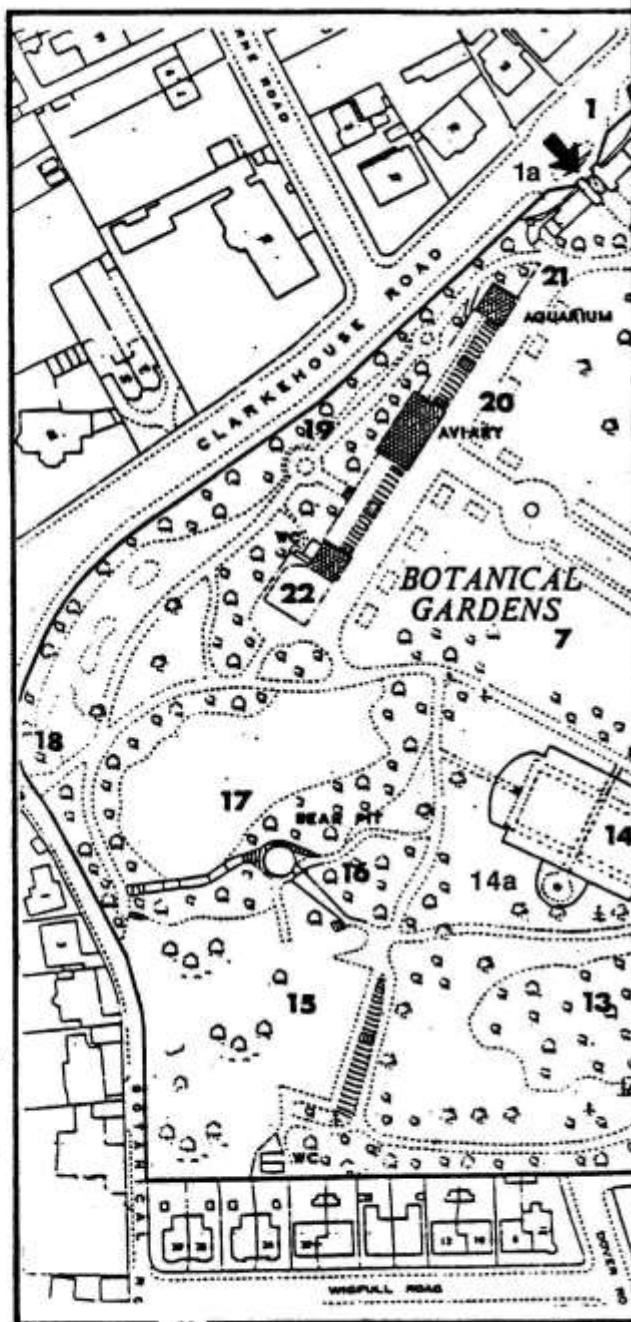
Plants: Bressingham Gardens, Diss, Norfolk, IP22 2AB.

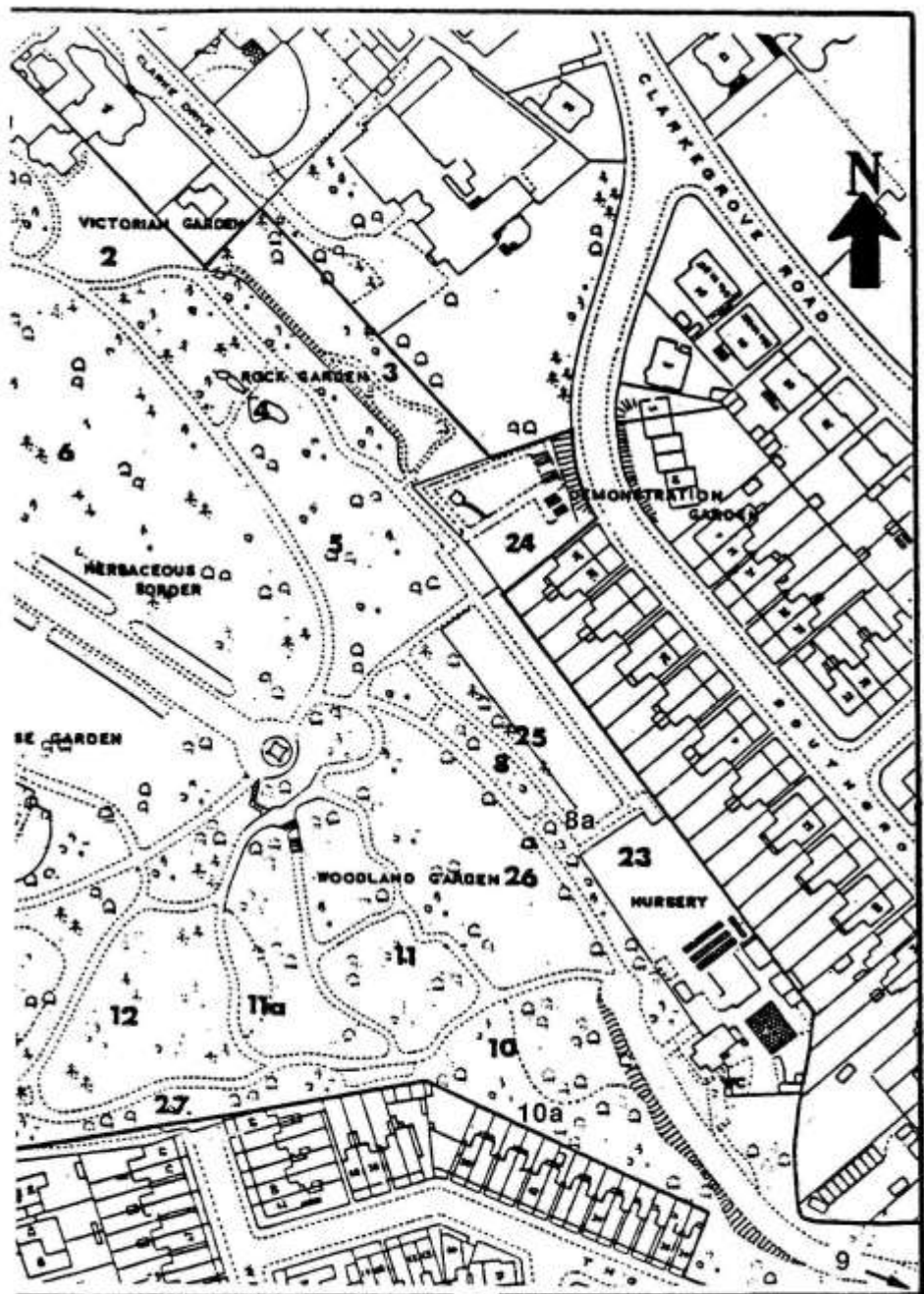
Text and design by Susan Kohler, Hellmuth Kohler,
Arroll Winning, and Don Williams

SHEFFIELD BOTANICAL GARDENS

Key to Section Numbers

- 1 Main Entrance, Clarkehouse Road
- 1a Study and Information Centre
- 2 Victorian Garden
- 3 "Osborn's Field" - Trials and FOE Nature Garden
- 4 Rock Garden
- 5 New Rock Garden
- 6 Main East Lawn
- 7 West Lawn
- 8 A. G. M. Collection
- 8a Hardy Cranesbills Trial
- 9 Thompson Road Entrance and Conservation Area
- 10 Sorbus Lawn
- 10a Weigela and Diervilla Collections
- 11 Woodland
- 11a Peat Garden
- 12 Cedar Lawn
- 13 Copse Shrubberies and Malus Lawn
- 14 Rose Garden
- 14a Ornamental Grasses Trial
- 15 South of France/Bear Pit Garden
- 16 Bear Pit and Entrance
- 17 Birch Hill and Heath Garden
- 18 Brocco Bank Entrance and Disabled Persons Garden
- 19 Clarkehouse Walk
- 20 Main Pavilion/Aviary
- 21 East Pavilion/Aquarium/Colonnade
- 22 West Pavilion/Plant House
- 23 Nursery
- 24 Demonstration Garden Robert Marnock Garden
- 25 Botanical Supplies Unit
- 26 Bottom Lawn
- 27 Long Wall Borders





NOTES

Why not join F.O.B.S. ?



FRIENDS OF BOTANICAL GARDENS SHEFFIELD (FOBS)

FOBS is an organisation set up in 1984 designed to help those interested in amateur gardening and to assist in programmes of activities for the disabled and disadvantaged.

FOBS welcomes members and undertakes to:

- Organise lecture programmes, demonstrations and training classes
- Organise visits to member's gardens, to nurseries and to gardens of repute regionally and nationally.
- Operate a reference library and to publish advisory leaflets
- Support Sheffield Botanical gardens on a charitable trust fund basis to enable improvement projects to be carried out
- Collaborate with other organisations interested in similar activities.
- Assist in the operation of the National Plant Collection (Weigatas)

ACTIVITIES :-

1. **VISITS** : Including local programme and coach trips
2. **HARDY PLANT GROUP (H.P.G)** : plant appreciation, seed collection and plant propagation.
3. **DOWN TO EARTH GROUP (D.T.E.G)** : Practical work under supervision in connection with plant propagation, general maintenance of the Robert Marnock Garden and plant trials.
4. **GUIDED TOURS** : Garden Tours with FOB's guides by arrangement.
5. **PLANT TRIALS** : Display of collections of new plants.
6. **PLANT MARKETS** : To organise regular sale of hardy plants etc.
7. **FLOWER SEED DISTRIBUTION SCHEME**

MEMBERSHIP :-

All members - £3 per person. Due September 1st
The syllabus is sent to all paid members in December for the following years activities.

Further information from the Hon. Secretary
Mrs J E Grahame
37 Haugh Lane, Sheffield S11 9SB
Telephone 380293

All meetings are held at the New Demonstration Centre, at the Thompson Road end of the Botanical Gardens.