

# The Challenge And Interest Of Gardeners In Scotland's Northern Isles



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# Outline

- Location of the Northern Isles and its climate
- Importance of providing shelter from the wind
  - Walls, trees, hedges and shrubs
- Hardy plants for the border
- Spring & Autumn colour
- Garden features
  - Rockeries, Vegetables, Fruit and herbs
- Lea Gardens in Shetland

# Introduction



**Some views of Orkney**



**Some views of Shetland**



- **Some photographs of rural views in:**
  - Orkney
  - Shetland
- **Most visitors to Orkney & Shetland would have some of the following impressions:**
  - A lack of trees
  - Rural land-use dominated by livestock production
  - The sea is usually close
  - Weather that is windy, changeable, cool and often wet
- **At first sight, not conducive to colourful gardens**
- **But, gardening is a popular hobby in both islands and as a result of trial and error a wide range of hardy, colourful garden plants are grown.**



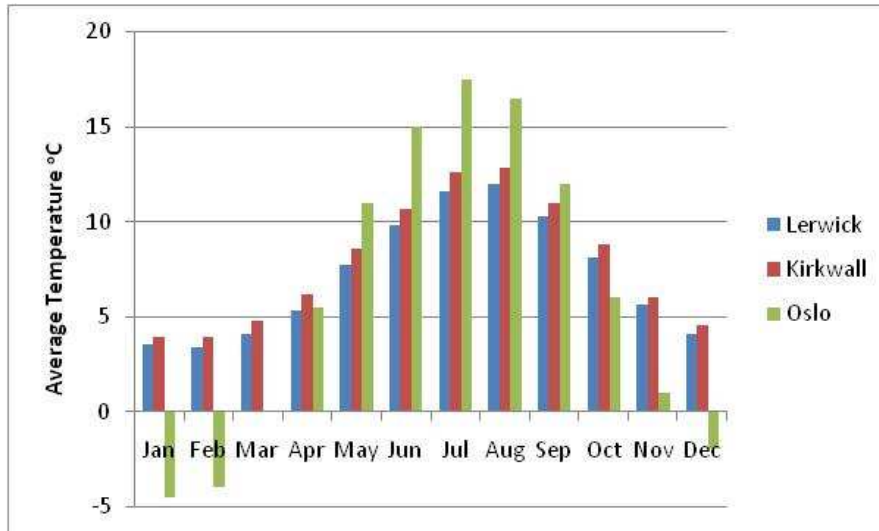
# Location & Climate



- Orkney, 59°N; Shetland 61°N.
  - Further N than some parts of Norway or Sweden
- Orkney is about 10 km and Shetland about 170 km off the N coast of Scotland
- Referred to as the Northern Isles – most N inhabited part of the UK
  - Population: Orkney, c. 20K; Shetland c. 22K
- Location has a dominant effect on climate



# Climate



- **Temperature** is moderated by the **Gulf Stream**. Compared with similar latitudes in Europe:
  - Milder winters
  - But, cooler summers
- **Wind** – one of the windiest parts of the UK:
  - >30 days gales/yr
  - Results in poor plant survival, wind pruning
  - Salt spray – nowhere >5-8 km from sea
- **Rainfall**
  - Av monthly rainfall, 50-120 mm
  - Waterlogging of soils in winter can be a problem
  - But, summer droughts do not usually occur
- Generally, conditions in Orkney are more favourable for plant growth than in Shetland

# Soils & Implications Of Climate & Soils



**Peat soil in Shetland  
(Jenny Murray, UHI)**



**Preparing planting holes for  
fruit bushes in Orkney**

- Soils
  - Mostly tend to be acidic but in many places improved for agriculture over hundreds of years (drainage, lime, organic matter)
  - More widespread peat soils in Shetland
- Implications
  - With protection from wind and improvements to soil, a surprising range of plants from lower latitudes can be grown because of relatively mild winters
  - But, careful plant selection is necessary.
- Remainder of this presentation describes some of the plants which are known to succeed, particularly in Orkney.

# Sources Of Gardening Information

- The information about gardening in the Northern Isles illustrated in this presentation reflect many years of gardening experience by people associated with the NPNP project in Orkney & Shetland.
- Another source has been a survey of Orkney gardeners and local plant retailers carried out by Geoff Sellers as part of the NPNP project. Main results related to plant preferences:
  - Plants should be wind- and winter-hardy , tolerant to salt, long-lived and long-flowering
  - Perennials are of particular interest, especially trees and shrubs
  - Trees are appreciated as architectural features
  - Conifers are of less interest than broad-leaved trees
  - Areas for wildflowers are important



# Providing Shelter From The Wind



- Probably the most critical step in garden design in O&S. It can be achieved in different ways
- Walls often used as wind breaks
  - Also establish boundaries
  - Rich heritage of dry stone walls for agriculture; incorporated into many garden boundaries
  - Attractive stone
- Some of the older country & town houses have high walled gardens – e.g. Balfour Castle (19<sup>th</sup> Century)

# Providing Shelter From The Wind



- Another strategy was to excavate sunken gardens
  - Skail House. Very few on this scale but even today gardens on slopes are often cut out of the hill-side to provide shelter
- In towns & housing areas, houses & buildings help by creating their own sheltered microclimate
- Cheapest modern option – to create living shelter belts with hedges & trees, wind break netting:
  - Escallonia, willow, wind break netting .
- Some of the trees and bushes used as wind breaks are shown in the next slides



# Wind Breaks - Trees



***Acer pseudoplatanus***



***Laburnum alpinum***



- Sycamore is the most successful large species of tree in Orkney but is too big for smaller gardens where willow and several small tree species are used



***Sorbus aria* and hybrids**



***Griselinia littoralis***





# Shelter Belts – Trees / Hedges / Bushes

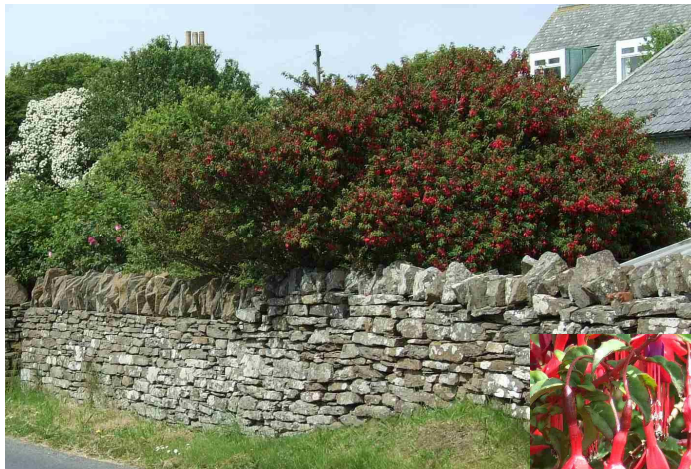


***Olearia semidentata***  
(a small tree)



***Escallonia macrantha***

- Hedges are very important for providing wind protection.
- They can also be very colourful



***Fuchsia magellanica***



***Hebe x franciscana***





# Wind Protection – Hedges / Bushes



***Olearia haastii***



***Brachyglottis*  
*Dunedin Group*  
*'Sunshine'***



***Olearia*  
*macrodonta***



***Rosa rugosa***



# Architectural Plants / Lawn

- While many plants can be architectural, the following are most commonly included in Orkney gardens because of their distinctive shape:
- Areas of lawn help to display architectural plants and are important in most gardens



***Cordyline australis***



***Cortadeira selloana***



***Phormium tenax***



***Libertia grandiflora***



# The Border - Shrubs

- Shrubs can be used to reinforce the shelter from trees and hedges. Several also have attractive flowers or foliage as shown in the next two slides:



*Lonicera involucrata*



*Berberis thunbergii f. atropurpurea*



*Salix lanata* (left)

*Lonicera periclymenum* (right)



# The Border - Shrubs



***Lavatera arborea***



***Potentilla fruticosa***



***Buddleja davidii* & *B. globosa***





# The Border – Tall Perennials With Vertical Interest

- Once shelter from the wind has been provided, tall perennials can be grown which add vertical interest to the border:



***Aconitum napellus* and *Lilium pyrenaicum***



***Inula magnifica***



***Delphinium elatum*  
*Digitalis purpurea***



# The Border – Perennials Of Medium Height



***Astrantia maxima***



***Stachys lanata***



***Inula hookeri***



***Chrysanthemum maximum***



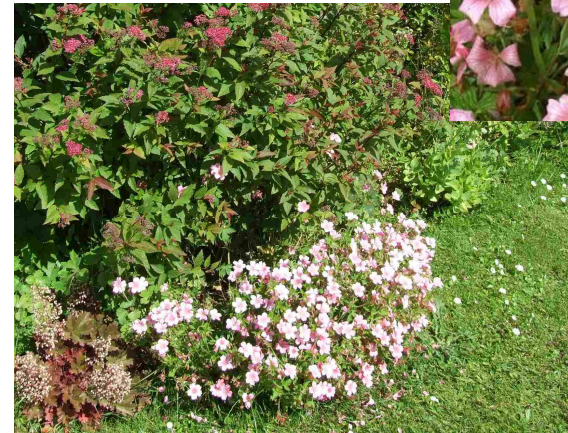
# Front Of The Border



***Osteospermum jucundum* (back)**  
***Saxifraga rosacea* (front)**



***Alchemilla mollis***  
***Alchemilla alpina***



***Geranium endressii***





# Conifers & Heathers



***Chamaecyparis lawsoniana***



***Juniperus communis***



**Native heather (*Erica cinerea*) – Ring of Brodgar, Orkney**

- The most widely planted conifers in Orkney are *C. lawsoniana* and *J. communis*.
- But conifers are not nearly as popular as in the south of Scotland. Many suffer branch dieback from salt/wind.
- Heathers are also not popular in N Isles gardens, probably because they are common in the countryside



# Spring Colour



***Helleborus niger***

- Most of the previous spp flower over the summer, but many spp provide spring colour in Orkney
- Early colour comes from hellebors, snowdrops, flowering currant and crocuses
- Primulas also provide a variety of colour, together with daffodils and bluebells



***Ribes sanguineum***



***Primula denticulata* (right)  
*Primula 'Wanda'* (upper left)**



# Autumn



***Crocosmia x crocosmiiflora***



***Nerine bowdenii***



***Rosa rugosa***



***Sambucus nigra***



- Relatively few plants flower in the autumn. The main exceptions being *Nerine* and *Crocosmia*
- Colour is also provided by a number of berry bearing plants
- Few plants produce a dramatic autumn foliage with the exception of *Aronia*



***Aronia macrocarpa***



# Garden Features - Wildlife

• Gardeners often design their gardens to encourage wildlife:

- Wild spp may be allowed to establish or deliberately planted
- Other plants may be established which have attractive flowers for insects or berries for birds.



***Dactylorhiza  
purpurella***



***Prunella vulgaris  
Lathyrus pratensis***



***Borago officinalis***



***Sorbus aucuparia***



# Rockeries / Container Plants



Rockeries often feature in Northern Isle gardens, especially where these are on slopes.

- The combination of slope, freer draining soil and wind can produce a surprisingly dry habitat.
- Most households display a range of annuals – esp. *Petunia*, *Lobelia*, *Calendula* & *Mesembryanthemum* in pots or tubs in sheltered sunny areas outside





# Vegetables & Herbs



**Garden vegetable patch**



**Salad plants being grown in a walled garden – Balfour Castle**



***Foeniculum vulgare***



- Many gardeners leave specific areas for growing vegetables, especially potatoes, swedes, cabbages, leeks and salad plants.
- Fennel is often grown both as an aromatic herb and delicately leaved architectural plant.



# Fruit



- Small areas of fruit often feature in Orkney gardens
- Species which can be grown successfully include the following:
  - Blackcurrants, Gooseberries, Strawberries, Blackberries



***Ribes nigrum***  
***Fragaria x ananassa***  
***Ribes uva-crispa***



***Rubus fruticosus***



# Lea Gardens - Shetland



- UK's most northerly botanical gardens:
  - 1500 spp; 400 genera
- Demonstrates a variety of habitats including:
  - Shelter belts
  - Shaded woodland
  - Peat garden
- Themes – e.g. “The Ship”
  - Masts, rope, sand and associated flora
- Descriptions of what is grown:
  - “The Impossible Garden”, Rosa Stepanova
  - Web site:  
<http://www.leagardens.co.uk/>

# Summary

- Wind, salt spray and soil water-logging in winter makes gardening a challenge in Orkney and Shetland
- Creating shelter from the wind is the single most important step in creating a garden in the Northern Isles.
- The absence of protracted cold weather in winter and dry weather in summer allows a colourful range of species from lower latitudes to be grown
- Many of the most attractive, wind-resistant and salt tolerant species come from New Zealand, S America or S Africa
- Acknowledgements
  - Clive Chadwick and Fay McKenzie for gardening information
  - Geoff Sellers for his contribution to the Orkney programme of the NPNP project
  - Rosa Stepanova for photographs of Lea Gardens