

# Agenda

- Why should we not water the garden?
- How can we achieve this?
- The garden at Montiano
- Key plants
- Colour in every season

# Why should we not water the garden?

- The old concept of an "English style garden" is totally unsuited to the natural environment and climate in central Italy.
- Water-wise gardening is fundamental: the cost of water can only rise and water resources are becoming ever more scarce.
- We want to preserve the 'spirit of place' and create a garden in harmony with the surrounding countryside.



Mediterranean Garden Society Associazione Giardino Mediterraneo



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# This approach does NOT apply to ...

- Vegetables
  - We want our veg to grow quickly and to mature within a single season
  - They need all the water and nourishment we can give them
- Plants in pots
  - They cannot seek out water and nutrients for themselves

#### How much water would we save?

An 'English style' lawn:

- Needs on average 6 to 8<sup>\*</sup> It of water per day per square metre
- During a watering season of 150 days this means about 1000 lt of water per square metre per year
- A small lawn measuring 5m x 10m requires

#### 50.000 litres of water every year

• And in the end it's still only grass.



\*Data provided by Vivaio Salto del Prete

How can we achieve this?

- The answer can be found in the surrounding countryside: we should imitate these conditions.
- In the Mediterranean 'Macchia' the plants grow happily without being watered or fertilised.
- Wet winters are followed by hot dry summers with sporadic but heavy rain storms.
- The plants are trimmed by goats and other wild animals.



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# Choose the right plants

- Indigenous plants that grow in the countryside don't get any care.
- Cistus, phlomis, broom, dog rose, stachys, thyme, helichrysum, euphorbia, orchid, anenome, poppy, euonymus, dog wood, juniper ...



The right plant in the right place

Choose the plant according to its needs:

- Drought tolerance
- Winter cold resistance
- Sun or shade
- Alkaline or acidic soil
- Clay or sandy soil



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# Plant correctly

- The right moment is in autumn
  - Mediterranean plants do not grow in summer
  - In autumn the soil is softened by rain which allows the roots to penetrate better down into the soil
- For more effective watering, make a 'basin' around each plant approx. 60cm wide and 20cm deep
- A square hole for trees stimulates the penetration of the roots into the soil
- Group plants quite close together to create a cooler micro-climate



Photo: Olivier Filippi

# What if I can't find the plants in autumn?

- This can be challenging
- Many vivai only stock up in spring
- If necessary, you can also plant in March
- Otherwise keep the plant in a pot until autumn
- Any plant that you put into the ground after the end of April is going to really struggle ....
  - ... even if you water it all the time

# Plants start off best in square pots

- Round pots make roots grow the wrong way
- Square pots stimulate vertical root growth and prepare the plant for searching out water and nutrients



Photos: Olivier Filippi



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# Water wisely

- 5 to 30 litres at a time every <u>fifteen</u> days (or more) in the first year
- Water in the evening? ..... Or in the morning?
  - Water slowly by hand
- Group together plants according to their water needs:
  - place pots near to the house and more resistant plants further away
- Remember that plants indigenous to Mediterranean climates not only need no watering but *suffer* if watered in summer as it can cause disease and promote excessive growth which will reduce their lifespan. Let them aestivate in peace.

Photo: Olivier Filippi 12



## Make use of hard landscape features

• Use raised beds, terracing, dry stone walls to imitate nature: this creates drainage and captures moisture



Centranthus ruber 'Pink Sensation', & 'Albus'; Cistus x purpurea; Iris 13

#### Make use of hard landscape features



Rosa Pompon de Paris; Ceanothus repens

# Prune a just little

- Choose the right plant for the right space and don't try to constrain its growth habit.
- Avoid excessive pruning but trimming evergreens into spheres can emphasise their natural forms, thereby accentuating the Mediterranean atmosphere in the garden.



Foto: Trimmed spheres, Garden of Gary, MGS Italy member

# Mulch and Compost

#### **Compost YES!**

• Compost is an intelligent way to recycle garden way and can be used to improve the structure of stony soils

#### **Fertilizer NO!**

 There is absolutely no need to give fertiliser – in fact it stimulates lush growth that cannot be sustained by the plant in a drought. Plants in pots and roses are the exception

#### **Mulch YES!**

- Mulch helps keep down invasive weeds and reduces water evaporation from the soil
- It can be organic or mineral, e.g.
  - Bark
  - Gravel

#### Reduce, replace or eliminate the lawn

Various types of alternatives to lawns recommended by **Olivier Filippi**, pioneer of dry gardening, developed through experiments in his own vivaio e garden:

- Non grass lawn
- Gravel Garden
- Wild lawn
- Tall ground cover
- Flowering Steppe
- Mixed ground cover
- Flowering Terrace



#### Also consider using Bermuda grass 'Yukon'

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#### Reduce, replace or eliminate the lawn



**Flowering Terrace** 



Mixed ground cover



**Flowering Steppe** 



Wild lawn

Photos: Olivier Filippi 18

# The lawn at Montiano



Saturea, Teucrium aurum, Teucrium ackermani, Achillea umbellatum, Sedum <sup>19</sup>

## Create shade



Rose Lady Hillingdon, Centranthus ruber, Cistus x purpureus, Phlomis fruticosa, artichoke  $$20\end{tabular}$ 

#### Shade for the soil

• Plants for *ground cover*: create shade which will lower the soil temperature and thereby reduce evaporation



Vinca major

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# Water Wise - in summary

- 1. Select plants carefully by observing the local countryside
- 2. The right plant in the right place
- 3. Plant carefully
- 4. Plants raised in square pots
- 5. Water intelligently
- 6. Use hard landscaping to imitate nature
- 7. Avoid excessive pruning
- 8. Use mulch and compost
- 9. Reduce, replace or eliminate the lawn
- 10. Create shade for the plants and for the soil

#### The garden at Montiano



In the beginning ... a sea of mud

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# The challenge

- Colli del Trasimeno; altitude 435 m asl
- Summer: 40 degrees and no rain
- Winter: -8 degrees with rain (but not always) or snow
- Soil: alkaline, clay and stony



# The winter-spring drought of 2017

Drought situation as at 20 August 2017



- In the first 6 months of 2017, central Italy received only 20% of the amount of rain that would normally be expected to fall
- Is this going to be the norm?
- Should we water our gardens in winter?

Il Corriere della Sera 30 August 2017 (data from European Drought Observatory) http://www.corriere.it/cronache/17\_agosto\_30/effetto-deserto-100-giorni-italia-climaab597d36-8cfe-11e7-b5e1-7559ef64c47b.shtml

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August 2017

#### Spirea survives



October 2017



April 2017

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# The olive grove as garden



# Planting on the terraces



# The olive grove after two years

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# Gravel garden





# Key plants



#### Key plants

- We selected certain plants well known to everyone that when repeated, form the structure of the garden.
- These plants are well suited to the conditions here.
- Mediterranean plants often have characteristics in common that make them recognisable:
- Leaves that are
  - Silver or 'fat'
  - Thin or deeply cut
  - Aromatic

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#### Key plants

- Searching further, we find there are lots of interesting varieties even among the more common plants:
  - Cistus
  - Teucrium
  - Santolina
  - Phlomis
  - Rosemary
  - Euphorbia
  - Silver plants
  - Grasses

.... and a word about Roses

# Cistus



Cistus incanus



Cistus x purpureus



Cistus x florentinus



Cistus x tardiflorens

# Teucrium



Teucrium fruticans 'Azureum'



Teucrium aureum



Teucrium flavum



Teucrium cossonii

# Santolina



Santolina chamaecyparissus



Santolina viridis 'Primrose Gem'



Santolina benthamiana



Santolina rosmarinifolia 'Caerulea'





Phlomis purpurea



Phlomis purpurea 'Alba' 38

#### Phlomis

# Rosmary



Rosmarinus officinalis 'Sappho'



Rosmarinus officinalis 'Majorcan Pink'



Rosmarinus officinalis 'Boule'



Rosmarinus officinalis var. albiflorus

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# Euphorbia



Euphorbia characias subsp. wulfenii



Euhorbia 'Blackbird'



Euphorbia myrsinites



Euphorbia rigida

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# Silver plants





Helichrysum italicum

Ballota pseudodictamnus



Atriplex halimus

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# Grasses that go well with rushes & reeds



Festuca glauca, Leymus arenarius, Lygeum spartum, Miscanthus sinensis 'Yaku Jima', Poa labillardieri, Stipa tenuissima

#### A word about Roses

- Are roses too needy for a Mediterranean garden?
- No, but we must choose the right type of rose.
- Many antique varieties are better suited to a dry climate, for example:
  - China
  - Tea (<u>not</u> Hybrid Tea)
  - Noisette
- All these do well without watering or pruning
- Just give them some rose feed in winter



#### A 'dell' of China Roses



Rose chinesis

#### Some reliable roses



R. banksiae lutescens (Botanica)



Felicité et Perpetué (Semprevirens)



Papillon (China)



William Allen Richardson (Noisette)45

## Colour in every season



# Colour even in winter





Jasminum nudiflorum



Iris Unguicularia



Cotoneaster

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# Spring



Rosa 'Paul's Himalayan Musk' (R), 'Seven Sisters' Rose (L)

# Spring bulbs



Anenome Coronaria de Caen



Anenome Blanda Blue



Narcissus 'Cheerfulness'

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# The same pergola 40 days later



# Botanical species bulbs



Tulipa Sprengeri, Narcissus 'Thalia'



Tulipa Clusiana 'Lady Jane'



Narcissus 'Minnow'



Tulipa Humilis

# White shrubs in spring





Philadelphus



Viburnum sterile



Poncirus trifoliata

# Yellow shrubs in spring



Medicago



Coronilla glauca



Ulex europeus



Coronilla glauca 'Citrina'

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# Pink shrubs in spring



Syringa x persica



Sambus nigra 'Black Lace'



Cercis siliquastrum



Cotinus coggygria 'Royal Purple' 54

# Summer



Achillea 'Walter Funke', 'Summer Wine', 'Terracotta'

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# Blue plants in summer



Eryngium x tripartitum



Perovskia



Catanache caerulea



Caryopteris x clandonensis

# Yellow plants in summer



Bupleurum fruticosum



Hypericum



Achillea filipendulina



Heremocalis

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#### Summer bulbs



Madonna Lily (Lilium candidum)



Allium Sphaerocephalon (Drumsticks)



Gladiolus byzantinus

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# Autumn



Reflowering China roses

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# Autumn bulbs



Cyclamen hederifolium



Sternbergia lutea





Crocus sativus

60

# Autumn perennials



Salvia microphylla



Sedum spectabile



Epilobium canum 'Western Hills'



Gaura Siskiyou pink

# Conclusions



Choisya ternata

# Useful books







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#### With thanks to ...



Lucia Scovacricchi & Eugenia Natalino Vivaio Salto del Prete Città della Pieve http://www.vivaiosaltodelprete.it/



The Mediterranean Garden Society http://www.mediterraneangardensociety.org/

MGS Italy branch Associazione Giardino Mediterraneo http://www.associazionegiardinomediterraneo.it/

