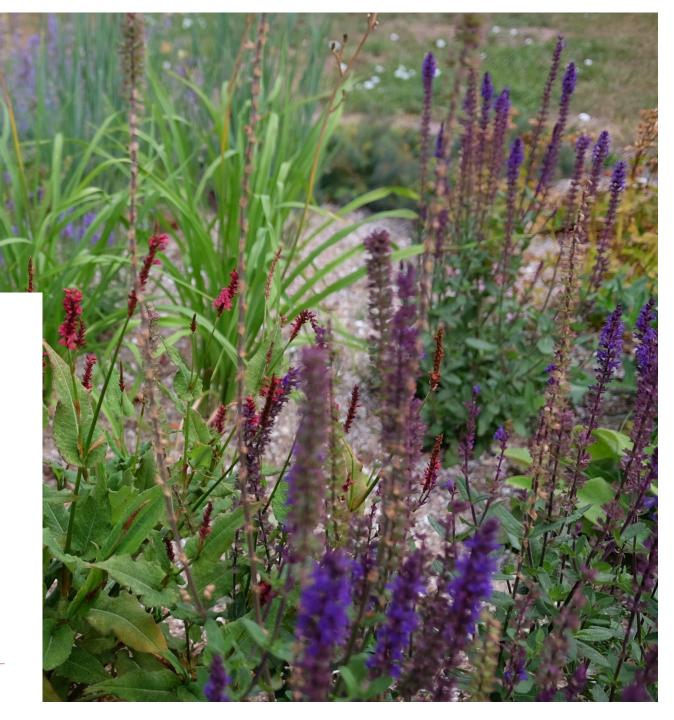
# A proposal for a sustainable perennial planting

Sustainable maintenance of Urban Areas Skovskolen, 21.8.2018 Anders Dam, Landscape Architect Associate Professor, IGN, Faculty of Science

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# Why speak about perennials?

Because they are often considered to be old fashioned, expensive, difficult to maintain and highly artificial - not sustainable (X)



And because they are very popular, much more popular than urban nature, street trees or lawns – perennial plantings just have that extra

and *can* be made and maintained sustainably



#### This case

175 m2 in an urban public garden in the historical centre of Roskilde

Not the most exposed or finest location in Roskilde, but a lot of people pass by every day.

Not a lot of money for maintenance, but a skilled and interested maintenance staff

A tradition for cooperation between maintenance staff and planners

Established in late 2017, maintained to survival in the burning summer of 2018



### The way it is done

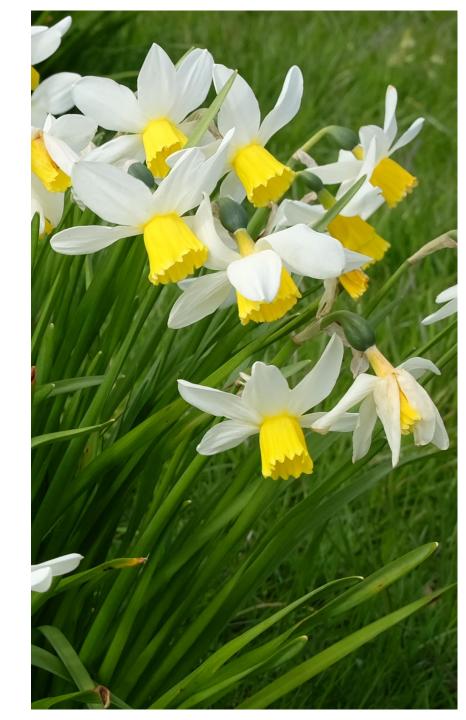
German Leitstauden Prinzip – evolved to make naturalistic, dynamic plantings witch are beautiful through seasons and easy and cheap to maintain

Plants divided into 4 groups – 4 layers Many species and cultivars used – in this case 41 species of perennials, grasses and geophytes

No planting scheme

No compromises made in the establishing process

Maintenance based on skills, dialogue and participation in decision making



# The soil

Existing soil contaminated with weeds

We dug it out and replaced it



We replaced it with a recycled substrate, manufactured locally

and 100 cms of local, not renewable gravel  $\checkmark$ 

No pesticides used



### The 10 cm gravel mulch

Significantly reduces weed seedling establishment

Significantly reduces invasion of snails and slugs

Keeps soil temperature and moisture stable

Makes hand weeding much easier



#### The plants

Plant species and cultivars chosen and bought from nurseries close to Roskilde

The many different species gives + 8 months of flowering, positive for pollinators

The many different species gives a big diversity in habitats for invertebrates

The long flowering period makes people respect the planting



# The principles of the Leitstauden Prinzip

No planting scheme planting process based on and dependent on dialogue

Replacements possible

Replanting not necessary for the design

Leaving dead seed heads and plant structures is not popular

Working with new principles is a challenge to the maintenance crew





### So, is it sustainable?

# In an economic perspective

Not if the alternative is lawn, monocultural shrubs or something else boring

If the alternative is other ways with perennials or beddings with annual plants





#### So, is it sustainable?

#### In an environmental/biologic perspective

Very much if the alternative is lawn, monocultural shrubs or something else boring

And also if the alternative is other ways with perennials or beddings with annual plants



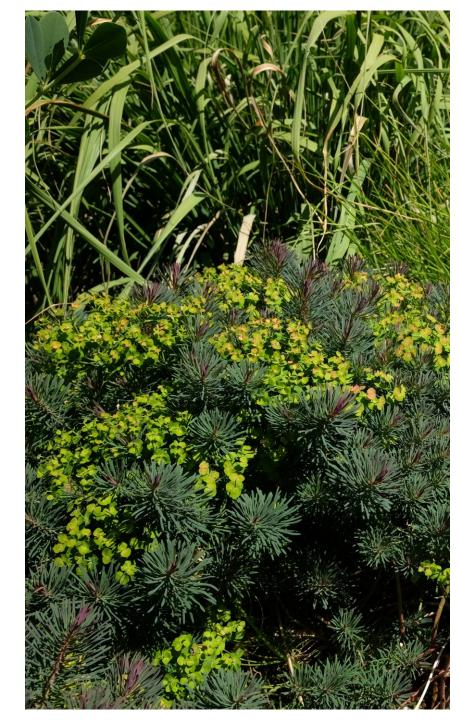
### So, is it sustainable?

# In an social perspective

Very much if the alternative is lawn, monocultural shrubs or something else boring

If the alternative is other ways with perennials or beddings with annual plants





# Are perennial plantings better or more sustainable than other plantings?

No, that always depends on the context

But they are not old fashioned, expensive, difficult to maintain and highly artificial

and they *can* be made and maintained sustainably

Thank you for your attention.

