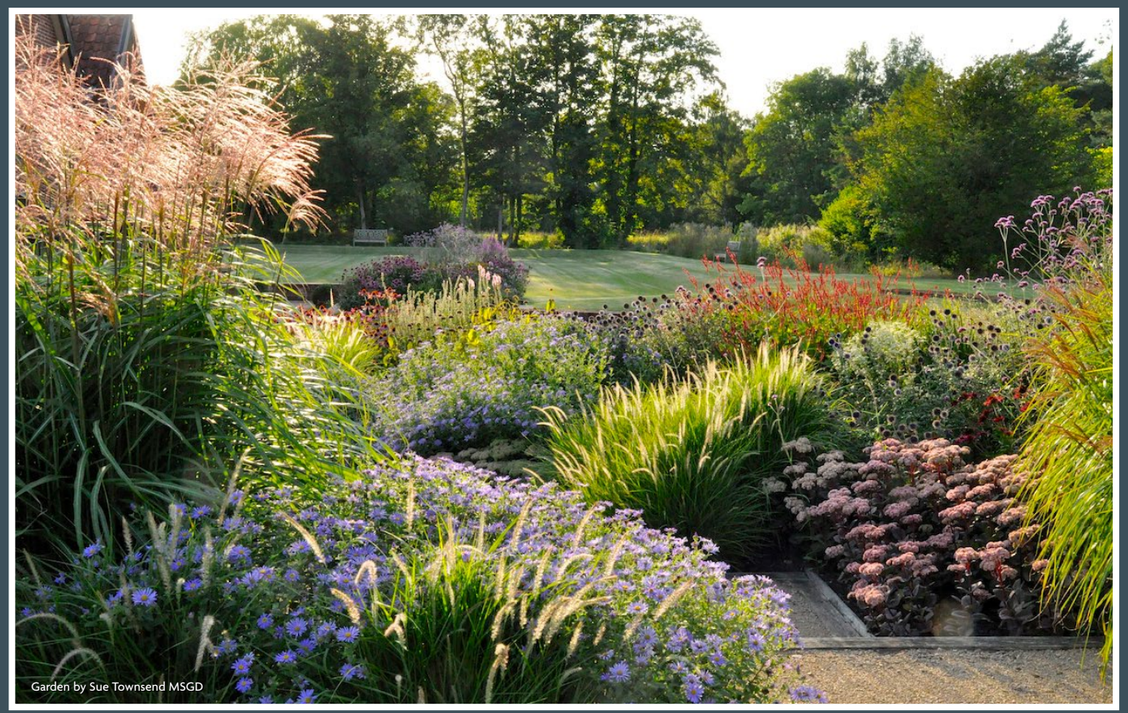
CREATING GARDENS AND LANDSCAPES WHERE SUSTAINABILITY COMES FIRST

This Manifesto Support Guide is a supplement to the SGD Manifesto for Sustainable Gardens and Landscapes. All the thoughts and ideas collated here stem from the delegates at the first SGD Symposium, and the associated breakout sessions, which took place at RHS Garden Wisley in July 2022.

This document will be updated annually. We welcome ideas and contributions from SGD members. Please send contributions to **info@sgd.org.uk**

SGD SOCIETY OF GARDEN DESIGNERS®

SUSTAINABILITY


Garden by Sue Townsend MSGD

The United Nations Brundtland Commission defined sustainability as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs'. This definition underpins the United Nations' Sustainable Development Goals and should be an ambition that the SGD adopts too.

TREAD WITH A LIGHT TOUCH AND THE EARTH WILL REPAY YOU IN MORE WAYS THAN YOU CAN IMAGINE.

David Stevens FSGD

DESIGN APPROACH

- The design and construction of a garden offers the opportunity to incorporate or use a vast range of products. While we cannot necessarily know the methods of manufacture and the materials contained in all of these, it is important to be aware of the implications around sustainability or recyclability and if possible, advise the clients or end users accordingly.
- We should be positively thinking about working with suppliers and manufacturers to develop products that increasingly have a lower environmental impact.
- In terms of design, there should be respect for what already exists rather than adopting a slash and burn policy.
- While the client may want a clean slate with a bold, new design there is always an opportunity to discuss what might be possible by incorporating what is already in place, to get the very best from their garden.
- Trees, planting, paving, paths, and many other features can form the basis for a new composition that new ideas and materials can be woven around. This can substantially reduce costs, add maturity, and retain the history of a garden.
- Encourage clients to appreciate wilder and less maintained areas within the garden or landscape by education and visiting gardens where this is already practiced.
- In many designed gardens there may be a lack of understanding regarding aftercare, advice should be provided, and planting schemes should take this into account.
- We need to reduce the necessity for new resources and materials as well as minimising waste, not just in gardens and landscapes, but the way in which we maintain sustainable business practices in our offices, travel, recycling and all else.
- Gardens and landscapes are intrinsically beneficial for mental and physical health, they should be sustainable, which in turn sustains us.

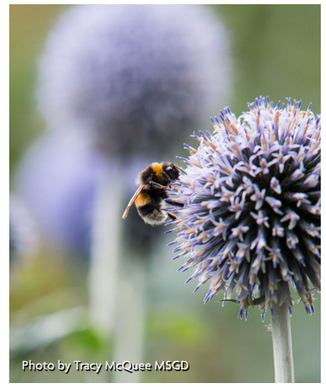


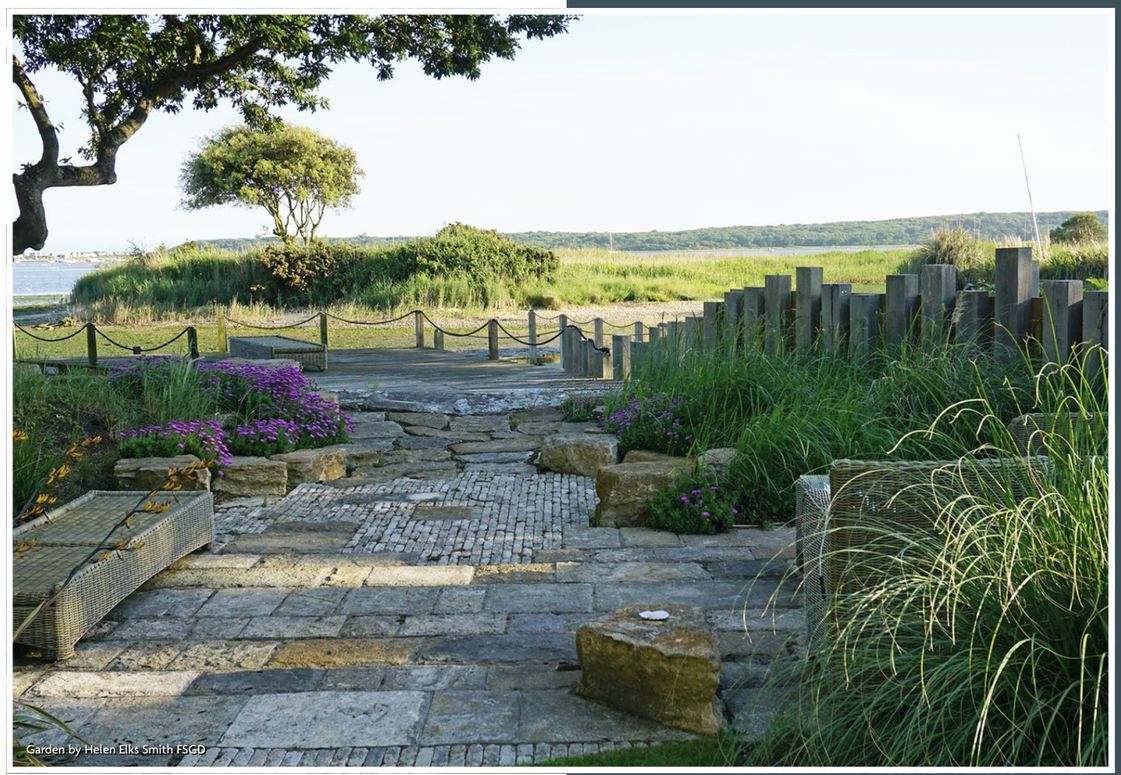
Photo by Tracy McQuee MSGD


Garden by Tracy McQue MSGD


Garden by Sue Townsend MSGD

HARD LANDSCAPE RESOURCES

- Conserving resources by recycling or upcycling existing materials on site such as stone, metal, concrete as well as foundations and subbases is good for the environment and saves money too.
- Think about the vernacular of the site in terms of design and inspiration. What are the local materials and building styles? How can these be sensitively incorporated into a garden to reinforce the link between architecture and landscape which in turn creates a natural and sympathetic composition, often with lower cost implications? Fashion should not necessarily be a criterion for good design, simply an adjunct to it.
- Consider reducing the amount of hard landscaping in your designs, therefore unsealing the soil, and reducing the overall cost of the build to the client and to the environment.
- Educate clients about the merits and cost implications of using different materials and surfaces i.e. natural stone as opposed to manufactured.
- Be aware of the carbon footprint of different materials by considering the energy consumption required for manufacture and impact of traveling from source to site.
- Consider the impact of extraction and quarrying of natural stone and the subsequent destruction of existing habitats and the possibly permanent loss of species that exist in the landscape. Although redundant quarries can be rewilded with great effect and/or used for recreational purposes, this is not necessary restoration of previous damage.
- Working with topography of the site can reduce the need for remodeling which might involve heavy equipment and soil compaction. Work with local suppliers but do remember that many materials are imported.
- Be aware of how the materials will be disposed of at the end of their life. Design for dismantling so that materials can be repaired and/or reused.
- Consider using renewable materials (i.e. bio-based materials such as timber, bamboo etc.). but use the correct bio-based product for the application.
- Encourage and support suppliers that use biodegradable pots and consider the use of 'Pot Swap' schemes.
- Be aware that compost bags and plant packaging involves a huge amount of plastic. Consider delivery of loose compost rather than pre-bagged where possible or specify biodegradable materials


Garden by Helen Elks Smith FSGD


Garden by Mark Lawrence MSGD

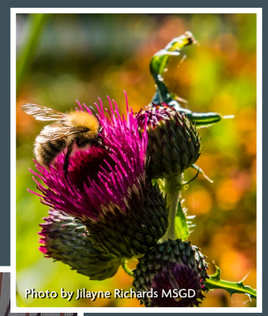


Photo by Jilayne Richards MSGD


Garden by Jane Brockbank MSGD

WATER AS A RESOURCE

- Where possible preserve water and minimise runoff (permeability). Use SuDS – sustainable drainage systems and change the trend for 'Pave and Seal'.
- All hard landscape areas should be planned and constructed with permeability as a major factor to minimise run-off.
- Incorporate gravel and other loose permeable aggregate, or even bio-based mulch such as bark, in areas that will act as paths and mulch to allow species to self-seed.
- Incorporate rainwater storage from roofs and other structures either in water butts or below ground storage tanks.
- Irrigation systems should be regarded as temporary in initial seasons only.
- Where run off is inevitable 'Rain Gardens' can be incorporated possibly with ponds or pools/ wetland areas and planting. This can be on a relatively small area in a garden or far larger in a municipal or urban space.
- Natural swimming pools have many advantages over conventional swimming pools.

VALUE OUR SOIL

- Soil husbandry directly influences and can enhance species rich schemes. Understanding soil types will determine and enhance planting schemes.
- Preserve soil where excavation is necessary.
- Work with what you have regarding pH values, soil type and texture and maintain fertility with organic material as both a conditioner and mulch.
- Use organic fertilisers over inorganics. The creation of compost is a valuable asset. Encourage your clients to consider home composting.
- In certain situations, soils that have been already destroyed by what has come before or ones already lacking in topsoil can be modified with materials found on site, such as crushed brick or stone to create conditions for specific planting regimes.
- Minimising and reducing peat extraction needs to be continued together with the use of peat free composts. There is still considerable resistance with growers. Good peat alternatives can be expensive adding to the price of plant production and subsequent sales.
- Reduce the use of herbicides and insecticides.

PLANTS, PLANTNG AND INCREASING BIODIVERSITY

- We need to reverse the decline of biodiversity which has accelerated over the past fifty years.
- Aim to increase biodiversity which will include the range of species and organisms that are found in a garden or landscape. Plants, animals, insects, bacteria, fungi, all work together in ecosystems, interacting with each other and their physical environment. These ecosystems are delicately balanced and are required for the sustainability of all forms of life.
- A garden can be analysed to recognise and understand specific habitats. This could include areas of wet or damp ground as well as particularly dry places. Signs of wildlife should always be considered.
- A garden can be remodeled to create a range of different habitats which could be far more diverse than those initially found. Planting diversity provides habitats for a greater range of species. Trees and the selection of appropriate species is particularly important.
- Where possible, choose and use plants to restore ecosystems.
- Design planting plans to support biodiversity with scientific understanding of soils, microclimate, situation, and aesthetic appeal.
- The importance of creating and maintaining communal gardens and allotments in urban areas adds greatly to biodiversity.
- Gardens or landscapes rich in different plants, which can be a mix of indigenous and exotic species, will attract and provide food for a wide range of pollinators as well as their lava. Incorporate species that extend flowering season in planting schemes. ‘Layering’ plants at different heights also provides ground cover, habitats, and food for a wide range of invertebrates alike – from soil micro and macro fauna up to birds and mammals.
- Establish and encourage ‘corridors’ in urban and other areas that will allow free movement of wildlife both within and between gardens and landscapes. Movement of species can be facilitated by unsealing soil, layering planting, and opening gaps in boundaries. Think of linking gardens with similar trees and plant species.
- Encourage the retention of fallen branches, trees, and leaf litter for biodiversity.
- if possible, retain existing planting including trees, shrubs, hardy perennials, and then work new designs around them.
- Source plants to minimize carbon footprints by working more collectively with local and British regional nurseries.
- Be aware of global warming and climate change with particular emphasis on plant selection and suitability.
- No mow areas, allow plants to self-seed. Many hardy perennials need not be cut back until spring as they are a valuable food resource in winter.
- Suggest and use biological control, nematodes, and companion planting.

TREES

- Trees cool buildings with shade and on a larger scale they reduce urban heat through transpirational cooling. They are vitally important to provide carbon capture through photosynthesis. They reduce pollution, reduce city temperatures, prevent flooding, keep soil rich in nutrients. They also provide habitat for urban biodiversity.
- Plant younger trees and smaller, younger plants adopting a ‘right plant, right place’ policy. Bare root trees and plants in season will reduce the use of plastic packaging.

GREEN ROOFS AND WALLS

- Green roofs can reduce water run-off into drainage systems, they can reduce both ‘urban heat effect’ and pollution as well as improving air quality. They provide insulation and prolong the life of the roof. They benefit wildlife and improve air quality. Consider connecting green roofs to ground planting via green walls to allow movement of species.
- Green walls reduce CO_2, heat reduction in urban areas as well as noise and pollution. They can reduce storm water run-off and can also harvest water which can help reduce freshwater irrigation. However, they are usually constructed with plastics and need fixing which have their own environmental implications. Climbing plants can be equally effective in many situations being more cost effective and needing less maintenance.

ARTIFICIAL GRASS

- Artificial grass is a byproduct of the petro-chemical industry and is predominantly non-recyclable. It has a high carbon footprint in terms of manufacture, transportation, and installation. It is sterile, unable to support wildlife and a negative food source. It limits the amount of nutrients for trees and plants growing in the vicinity. Think of alternative surfaces such as ground covering plants or even the retention of a small lawn!

LIGHTING

- Consider if lighting is needed given the impact of artificial light at night on both wildlife and our own health and well-being. Where it is used, carefully consider the design to minimise its impact including switching it off when not in use.
- Emphasise and encourage the use of solar powered lighting and equipment or even the use of bio-based candles in holders for evening mood-lighting.

PLAY AREAS

- Play areas are often planned with rubberised surfaces and although some of these are permeable many are not and will require sub-bases of variable construction and depth. We should think about more traditional opportunities for play, where enjoyment can be gained with areas of planting and features such as woven willow dens, swings from stout branches, climbing logs or other structures, or paths winding through rougher grass, all of which can be cost effective, environmentally-friendly and fun!

Society of Garden Designers
Katepwa House
Ashfield Park Avenue
Ross-on-Wye HR9 5AX

Email: info@sgd.org.uk
Tel: +44 (0) 1989 551 083

SGD
SOCIETY OF GARDEN DESIGNERS®