

LITHIC MULCHES

put your garden on a Paleo diet this summer

Western Cape gardeners are not the first people to struggle with drought. For as long as humans have farmed, lives have depended on growing plants in dry conditions. Our newsletter this month looks to the ancient wisdom of lithic mulches for surviving summer.

Whatever is lithic mulch?

The word lithic refers to stone. For example, Paleolithic means "old age of stone." A lithic mulch is any type of stone covering the soil. Lithic mulches are also called mineral mulches.

Lithic mulches have been around for centuries. Archaeologists have studied pebble mulching from all over the world. In the American Southwest, Pueblo people covered their fields and gardens with stones. This helped them to grow maize in areas that would otherwise be too cold or too dry. Chinese in the arid Asian northwest have been using sand and stone mulches since the Qing Dynasty.

On Easter Island, prehistoric farmers battled both irregular rainfall and high winds. They built extensive rock gardens in which they grew crops. Small stones covering the ground prevented evaporation and erosion. Large rocks stacked around plots provided shelter from wind.

In modern times, scientists have confirmed the benefits of lithic mulches. Although research has focussed on agriculture, gardeners should take notice. Especially in the Western Cape.

Rock your garden

Gravel is the most common lithic mulch in gardens. You can find gravel in a range of sizes and colors. Gravel from a local quarry, consisting of native stone, will blend into the landscape. Pale brown looks more natural than grey or black. White reflects light and can be glaring.

Different gravel sizes can add visual interest, but large stones are hard on the feet. For paths, 9 mm stone is most practical. Smaller stones are likely to scatter.

Gravel depth can be as little as 2.5 cm for paths. Aim for 5.0 to 10.0 cm around plants.

When planting a gravel garden, place plants higher than usual and add the mulch layer to cover the root ball. Do not bury the crown of the plant in gravel. For existing gardens, spread the gravel on any bare soil between plants.



Maintenance of gravel mulches entails occasional raking and weeding. The gravel may need topping up every few years.

The use of membranes or plastic under the gravel is not recommended. Membranes and plastic do not stop weeds. Weeds germinate and grow in the gravel above the membrane. At the same time, air and water cannot reach the soil. Worse still, the plastic always ends up showing, creating an eyesore.

5 BENEFITS OF LITHIC MULCHES



Reduced runoff. During moderate to heavy downpours, bare soil can lose up to 60 percent of the rain due to runoff. Gravel mulch reduces this to less than 10 percent.



Less evaporative loss. Bare soil loses water through evaporation, but mulch keeps water in the soil.
Research shows that soil covered in gravel stores up to 40 percent more water than bare soil.



Stabilizes soil temperature. Gravel protects the soil from extreme temperatures. During the day, the soil will be cooler and during the night, warmer, than bare soil.



Prevents compaction and erosion. Plants struggle to develop healthy root systems in compacted soil. Mulching protects the soil and stops the formation of a surface crust.



Provides better security. Gravel is a noisy surface. Intruders can't sneak up to your house undetected when you have gravel surrounds.

Grown in stone

Lithic mulches work best for plants from desert, coastal and grassland habitats. They are ideal for mediterranean plants that do not like humid conditions. These include most plants with grey leaves.

Plants from woodlands prefer organic mulches. If in doubt, research the origins of your plants before deciding on a mulch.

Gravel mulches are also not ideal for woodlands with deciduous trees. Fallen leaves are difficult to sweep up and detract from the appearance of the gravel.

Organic and mineral mulches differ in that organic mulches break down. Decomposing organic mulches improve soil structure and fertility over time. As many drought tolerant plants do better in lean conditions, this should not be a problem.

Stone age farmers used lithic mulches to grow food in hostile environments. You can apply their methods to help beat the summer heat. A beautiful garden is only a stone's throw away!

AGAPANTHUS

stylish survivors for Western Cape gardens



Agapanthus 'Nana' White

Growing agapanthus

Agapanthus are in the family Amaryllidaceae. Other members include March lilies, clivias and onions. Yes, the humble onion is related to lovely agapanthus.

Agapanthus are endemic to Southern Africa. Breeders have created a staggering number of hybrids and cultivars. Most of these are evergreen.

Anyone can grow agapanthus. Landscapers love them for mass plantings along roads and in other public spaces. These are tough plants that can survive neglect

To get the best from your agapanthus, add plenty of organic matter to the soil. Organic matter will also increase the water holding capacity of your soil.

Flowering may decrease if the plants become congested. Lift and divide in early autumn. Shorten the leaves to about half and the roots to a third. Replant immediately.

In recent years, agapanthus borer has plagued Western Cape gardeners. You can control this pest by spraying with Margaret Roberts Biological Caterpillar Insecticide.

Browse the latest Fairholme price list to find the perfect agapanthus for your garden.

This is our last newsletter for 2017.
We wish you all a

Blessed Christmas
and a gardening New Year.



Agapanthus'Silver Baby'



Agapanthus 'Barley Blue'

Agapanthus in brief

Size

Foliage

\$\prescript{30 to 60 cm}\$

 \leftrightarrow 30 to 60 cm

Flowers

\$\psi\$ 45 to 150 cm

Soil

Not fussy Requires good drainage

Exposure

Full sun to light shade

Season

Flowers summer



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