

## Plants for coastal regions

Wherever you live in Scotland, the elements provide some problems for gardeners. If you live near the coast, you'll know just how challenging salt is for plants.

When there are high levels of salt in the soil or in water, plants for various reasons can't absorb as much water as they need. Like desert plants, they have developed different strategies to make best use of the water they take in. A tiny number, like mangroves, do this by absorbing less salt through their roots. More usually, they conserve and eke out whatever water they manage to collect.

These salt-tolerant plants, halophytes, normally have leaves that keep hold of precious water and prevent it from being quickly lost into the atmosphere by transpiration. Some have fleshy or succulent leaves where they are able to store water. Some have leaves with a thick, waxy surface that prevents evaporation and others have hairy or wrinkled leaves. Hairs and wrinkles create minute pockets of still air over the tiny pores on the under surface of leaves from which water transpires. The structure of thick, bushy shrubs and tight rosettes of leaves also slows air circulation within the plant.

Coastal gardens are subjected to damaging gales which drive the salt particles several miles inland. So, the first task is to have an effective barrier to slow down the wind and reduce the risk of scorch damage to other plants in the garden. As I've said before, a living hedge is the most effective tool, and, fortunately, there are quite a few plants that handle salt-laden wind. Even if you live inland on a road where salt gritters are active throughout the winter months, you should also choose salt-tolerant hedging plants. Spray from the road will damage hedges, especially evergreens, and will contaminate any nearby soil.

It's not surprising that many coastal hedging plants are deciduous, as salt can scorch leaves, but a couple of useful exceptions are *Escallonia rubra* and *Olearia haastii*. Some evergreen Escallonias are hardy enough to cope with a Scottish winter. Two of the toughest ones are 'Donald Seedling' with white-flowers and 'Langleyensis', which puts on a fine display of rose pink flowers during the summer. The Australian Olearia, or 'daisy bush', has glossy, dark green leaves, ideal for conserving moisture, and this attractive compact shrub, with its mass of tiny daisy-like flowers is built to cope with desiccating coastal winds.

Most coastal hedging plants that appeal to me are, perhaps inevitably, deciduous. You probably wouldn't imagine roses would fit the bill – and few of them would – but *Rosa rugosa* thrives in these conditions. The plant's name, 'rugosa' means wrinkled, partly explains why it can handle these inhospitable coastal conditions. The wrinkled leaves of this compact, prickly hedge, greatly reduce air circulation, and we can enjoy a long summer flowering followed by a show of fine, red hips. They will continue long after the leaves have dropped.

Spiky, prickly plants can often cope with dry conditions, partly because they manage to conserve moisture efficiently. Few plants could fit this bill more aptly than *Eryngium maritimum*, sea holly. It's an attractive, architectural plant with stiff, spiny blue-green leaves, netted with silvery white veins. The small purple-blue flowers are packed into a rounded, teasel-like head backed by broad spiny bracts and hairless stems. Sea-holly is a medium height, clump forming perennial well worth some space in the garden even if it grows naturally in sand dunes and shingle beaches.

Plants like Eryngium that grow naturally at the back of beaches and along cliffs look just right in coastal gardens. *Centranthus ruber*, Valerian, does just that. It even grows out of dry stane

dykes. This clump-forming beauty is almost indestructible and grows widely in Dumfries, Galloway and Ayrshire. This favourite with Chelsea designers, butterflies and moths has either purple-red, reddish-pink or white flowers. Like so many coastal plants it has fleshy, grey-green foliage that inhibits transpiration.

It's easy to forget that a wide selection of our vegetables share the salt-tolerant characteristics of ornamentals. Fleshy-leaved brassicas, like that amazingly tasty sea kale, are native coastal plants. Again, its wrinkled grey-green leaves make it a sure winner when moisture is at a premium. Sea kale grows naturally out of shingle at the back of a few beaches on the east coast of Scotland as does *Brassica oleracea* the ancestor of modern brassicas. Cabbages, cauliflowers and calabrese demand much richer growing conditions, but they handle salt perfectly well.

Again, sea beet is the wild ancestor of all those mouth-watering spinach and chard plants I wouldn't be without, and that prince of vegetables, asparagus, was developed from small, compact, prickly asparagus that still carpets Mediterranean coast lines. Like so many coastal survivors, asparagus has roots sinking deep into the soil, seeking out water that is probably much less salty. The plant needs good drainage and it responds very well to a generous annual feed of seaweed meal.

If you are planning what to grow in a coastal garden, consider vegetable halophytes as well as more ornamentals than I could mention, like Tamarisks, Erigeron and the deciduous Azalea, *Rhododendron luteum*.