These monocotyledonous, usually herbaceous plants are widespread, versatile and adapted to conditions ranging from rainforests to deserts and intertidal habitats.

**STRAW**, from cereal crops; rice, wheat, oats, rye and barley. In northern Europe from as early as 1500AD corn dollies or tokens were made representing the spirit of the harvest and ensuring the success of future crops. The straw hat industry in Europe from the 1600s involved thousands of families in cottage industries making straw plait. In England this centred on Luton. In Europe straw was stitched (lipwork) into beeskeps, baskets for proving bread and for chair seating. Throughout Africa and America grasses have been used to make coiled vessels for beer, corn and storing grain.

**BAMBOO** The fastest growing plant in the world and the largest member of the grass family, the stalks are long and hollow with nodes at intervals and have great tensile strength but are easily crushed. Bamboo species are found in diverse climates from cold mountains to hot tropical regions, mainly in India, Indonesia, China, Japan, Africa and Australia. Bamboo is a versatile material, historically used in every aspect of daily life; for building construction, in fencing, traps, tools, furniture and basketry. In Japan thousands of artisans supplied articles for everyday use. There, a tradition of exceptional craftsmanship and basketry-as-art has developed with skills handed down through family members.

**PREPARATION**: Straw is generally tempered (soaked in water for long enough to allow it to be bent without splitting or breaking). It lends itself to plaiting and use in bundles for coiling.

**MEDITERRANEAN CANE** (*Arundo donax*) grows from the Mediterranean to the Far East in wet areas. It is used split in basketry and for blinds.

**MARRAM GRASS** is native to the coasts of Europe, growing on dunes, introduced and invasive in other countries. From the sixteenth century the marram weavers of Newborough, Angelsey, Wales plaited mats for thatching haystacks and later for horticulture, this cottage industry survived into the 1930s.

**ESPARTO GRASS** grows around the Mediterranean in sandy soil; it has great strength and flexibility and has been used for centuries for plaited ropes, sandals, mats and baskets.

**PREPARATION**: Bamboo is split in half along its length using a hatchet and then again into the required widths. The inner and outer layers are separated. The outer bark strip is considered the most beautiful. The flat strong strips lend themselves to plaiting: plain weave, complex twills and hexagonal weave.
LEAVES/PALMS

GARDEN LEAVES Crocosmia/flag/iris/daffodil/daylily may all be used for cordage, as a bundled core for coiled baskets or for plaiting.

CORN HUSKS were used by Native Americans for twined bags, plaits for hats, mats and corn husk dolls. Preparation: Collect leaves after the plant has flowered and dry them well. Dampen and wrap in a cloth before using.

PHORMIUM (New Zealand Flax/Harakeke) This plant is native to New Zealand, it is not actually flax but the fine white fibres have a similarity to linen. The tough, sword-shaped leaves grow up to three metres long and 125 mm wide. They fan out from rosettes at the base of the plant. Varieties with plain darkish green leaves are the most suitable. The outer leaves of each fan are harvested with a sharp knife leaving a central growing point of three leaves.

Preparation: The leaves are split into widths along their length and scraped to provide flat material for plaited baskets. These strips are first prepared by pulling them over a blunt edge to prevent them curling up. The long white silky fibres inside are revealed if the green matter is scraped away, this is a lengthy process. Washed and dried they can also be dyed.

AGAVE (Sisal/Yucca) Originating in South America sisal is now cultivated or grows as a weed in Central/southern Africa and China. One of the world’s important natural fibres it is valued for its durability and ability to take dyes easily. Twined baskets are made in Swaziland, Kenya, Haiti and elsewhere.

RAFFIA PALM The fibre is stripped from membrane on the underside of each long leaf and used to make hats, shoes and mats as well as exported as a natural string.

DATE PALM All parts of the leaf are used, from the midrib which can be split into thinner pieces, to the leaflets. In Spain and South America ornate ornaments are plaited for Easter celebrations.

FAN PALM (Ilala palm) The young pliable leaves are harvested, with only one third of the leaf taken, so the remainder can develop fully. In Kwa Zulu Natal Ilala palm is used to make finely stitched traditional coiled beer pots and many baskets for the tourist industry. Preparation: Leaves are boiled and then dried in the sun to soften them for weaving and may be dyed.

Preparation: Collect leaves after the plant has flowered and dry them well. Dampen and wrap in a cloth before using.
RUSHES & CATTAILS

RUSHES are plants in the Juncaceae family, found growing in wetland habitats, most of them perennials that spread by rhizomes.

SEDGES grow in similar habitats but have triangular stems

ENGLISH RUSH (Scirpus lacustris)
The freshwater bulrush grows in slow flowing rivers and is identified by the inflorescence of insignificant brown flowers at the tip of a long smooth green/blue stem.

In Medieval Europe loose fresh rushes were strewn on earthen floors of houses for cleanliness and insulation. By the C16 plaited rush matting was being used in large houses.

For rushlight candles, the spongy centre was dipped in fat or wax. A good 2’ rush provided light for an hour. There was a rush industry in Bedfordshire for many centuries. Felicity Irons carries on this tradition today, harvesting from flat bottomed punts cutting with a scythe type blade on the Great Ouse, Ivel and Nene rivers. Small scale harvesting by groups and individuals takes place by wading into the water and cutting by hand. In the southwest rushes grow in the river Isle in Somerset. June - August is the time to harvest. Care must be taken not to bend the stems which can be 6’ -10’ long. The cut and tied bundles are stood in the sun and wind to dry, and later stored for use. Rushes are used for cordage and in coiled, twined, plaited and stake and strand basketry. For the last two a mould is needed to work over to keep the shape.

SOFT RUSH (Juncus effusus) is very common in temperate wetlands. In Japan it is used to weave the soft surface cover of tatami mats and in Galicia for shepherd’s cloaks (fibres beaten and brushed.) Native Americans used it for teaching young girls to make baskets.

Soft rush drying in the barn

CATTAILS (Thyphus latifolia/false bulrush/great reedmace)
Easily identified by its brown furry spike, grows throughout North America and Eurasia. The leaves are cut in late July - August and dried before storing. It was used by Native Americans for mats and basketry.

Papyrus sedge
The fibres have been used for baskets and mats as well as early paper
Preparation: Sprinkle dried bundles well with water and wrap in a damp cloth for three hours to mellow, never soak them in water. Use them quickly or they will go mouldy. As you work English rushes wipe them clean and squeeze the air from the spongy centre from the tip to the end.
MATERIALS

WOODY STEMS

Shoots of the current year’s growth of many woody shrubs and trees make suitable weavers for basketry. Rods should be cut from late autumn until very early spring when the leaves have dropped and the sap is down.

HEDGEROW MATERIALS fruit woods: apple and pear, dogwood (cornus) varieties, alder, privet, field maple, lime suckers and coppiced hazel. Preparation: store for a few weeks in a shady place until rods become pliable.

WILLOW is cultivated as a basketry crop throughout northern Europe. Hundreds of named varieties are recorded. A national collection of over 1,300 is maintained at Rothampstead Research station. Originally based in Somerset, this was set up in the 1920s as a way of conserving varieties that were being lost, as rural crafts, such as basket and hurdle-making, declined.

Commercially grown willow is sold in bolts or bundles graded from 3’ through to 7’ or 8’ in length. Two year old rods, useful for handles and bases of baskets, are sold as sticks.

Willow is sold as:

- **Brown** dried with the bark on.
- **Buff** prepared by boiling the willow bundles with the bark on for several hours allowing bark tannins to permeate the rod staining it from a light to dark tan colour. The bundles are passed through a mechanical mangle with hooked rollers to remove the soft bark.
- **Stripped white willow** is sought for laundry baskets. Bundles of cut willow are stood in shallow pits of water overwinter until they break into leaf in spring. Then for a few short weeks the bark can be stripped easily and the white rods dried in the sun.
- **Skeins**, (thin ribbon-like strips) are obtained by splitting rods using a cleave, removing the pith and shaving the edges parallel. These are used in fine work particularly in France and Germany. Preparation: dry rods are soaked in a tank of water for hours or days depending on whether they are buff white or brown. They are mellowed by wrapping in a damp cloth before weaving.

The Somerset Levels is still the major commercial willow growing area in England. Water levels are maintained by a network of rhynes or drainage ditches, though flooding in recent years has made life difficult for the growers.
RATTAN (calamus) is a climbing palm native to Indonesia. The stems, which can grow up to a few hundred feet or more, climb through the forest canopy like a vine by means of hooked thorns. It grows faster than most tropical woods and provides an income for local people who ‘farm’ the plants harvesting the stems with gloves and machetes and dragging them in lengths of about 20’ from the forest. The spiny bark is removed to expose the core and the lengths taken to factories for processing.

Raw rattan is turned into products to be used in furniture making, basketry and chair seating. It is first boiled in a mixture of kerosene and diesel fuel to kill insect infestations and prevent staining and then labour intensively cleaned. Whole rattan was widely used to make baskets for the European fishing industry. Otherwise the shiny skin is peeled off and split into strips of varying widths that are used for lashing the joints of cane furniture or cane for chair seating. The remaining fibrous core is put through knives to turn it into lengths of varying shapes (round, flat oval and flat lapping) and diameters (from 1.6mm to 4.00mm). This material has been exported for many years for basketry. It is known as ‘centre cane’ in Europe and ‘reed’ in America.

Preparation: Centre cane is easy to dye in small quantities at home. Tie the cane into coils that will fit easily into the dyepot. The best colours are obtained with hot water dyes. Before weaving soak cane in warm (not hot) water for about half an hour depending on the thickness. Do not oversoak, small diameter cane only needs dipping. Keep damp in a towel while working.

AKEBIA is native to Japan where it grows wild in woods, hedges and thickets in mountainous areas. It is a popular material for ‘rustic’ basketry.

DOG ROSE Wild rose, ‘the bucky briar’ is valued in Ireland for making hoops for frame baskets. The stems have very little taper and the dense wood dries very hard. Strip the thorns from the stem using leather gloves, bend and tie the stem into shape before it becomes too dry and brittle.

HONEYSUCKLE/GRape Vine/ WISTERIA and other climbing plants all add texture to hedgerow baskets. Roll them into coils as you collect them and dry thoroughly.

Preparation: Soak in water until pliable.
CEDAR On the Pacific Northwest coast of America wood, roots, branches and bark from yellow and red cedar provided Native Americans with a material for everything from houses and canoes to rope, nets, mats and baskets. To collect bark women made a horizontal cut about 6” wide into the living tree and then, walking backwards they pulled a long strip up the tree trunk, afterwards leaving it to heal. The strips were folded and tied into bundles bark side in.

BIRCH Across Scandinavia and North America birch bark grows thick enough to remove in sheets. Supple like leather it is cut into strips for baskets, bags and shoes. In spring a vertical slit is made down the trunk and a sheet about two feet long can be peeled horizontally around it. These are stored flat with weights to prevent curling.

Preparation: Fresh bark can be worked straight away; stored bark is soaked in warm water and sometimes glycerine before using

ELM AND HICKORY The bast (layer immediately under the bark) of these trees has traditionally been used for chair seating in Europe and America. The bark of a felled log is removed with a drawknife or bark stripper. The bast is removed by making parallel incisions with a knife along the length of the trunk and lifting the long strips all the way around. These are rolled up bark side in and dried.

Preparation: soak in warm water until pliable

HAZEL Splints can be lifted from two year old silvery barked coppiced rods. A shallow incision is made into the bark and as the rod is bent, tension will allow the splint to lift. Several splints may be taken from one rod. Welsh ‘whiskets’ (a frame basket), were woven with hazel splints.

Many other tree barks may be used for decorative effect in basketry.

BRAMBLE Long thick shoots of bramble are cut, once the thorns are removed with leather gloves or by drawing them through holes punched in a tin, they may be split in two by hand or three with a cleave and the pith shaved away. They were used as stitching material for coiled straw work and in rustic baskets. This is still done today in Galicia, Spain.

PINE/SPRUCE In America and in Eastern Europe long shallow running roots are exposed using a digging stick and then split and stored in coils. This is a hugely time consuming process that produces extremely durable basket work.