

# **Indigenous plant notes for Mt Martha Primary School**

## **Grasses** - General comments

- Important as store carbon and are more efficient at this than trees as have more roots under the ground.
- Form staple diet for the world – ie ask who eats grass each day? – rice, wheat, barley, pasta etc all come from grass (except for gluten free!)

(Refer to Tree – general comments too, as also relevant to grasses and shrubs eg benefits of ground litter{

## **Lomandra longifolia (Spiny-headed Mat-rush)**

- Aborigines - for fine baskets and mats and the long leaves could also be split or scraped to provide fibre for string bags.  
In some places the leaves were used to weave eel traps. Can eat the base of new leaves quite tender and nutritious. Pull out easily so don't pull out the whole plant.
- Provide food for Skipper Butterflies that lay eggs in nearby litter. Need enough spaces between plants so can spread their wings to regulate their temperature when doing so.
- Provide protection for ground dwelling animals and reptiles.
- Protect soil, prevent erosion, shade helps retention of water

## **Poa labillardieri (Common Tussock Grass)**

- Aborigines – made string for nets, bags, baskets and bags as fibre tough. Also ate kangaroos that grazed on grasses. Grazing helped generate fresh new growth to rejuvenate grasslands.
- Wind pollinated - all grasses.
- Provide protection for soil, prevent erosion, shade helps retention of moisture
- Seed source for small native birds

## **Scrambler**

### **Tetragonia implexicoma (Bower Spinach)**

- Aborigines – eaten as greens/raw salad, but a bit salty. They ate red berries that are sweet when ripe., unpleasant when green.
- Berries also eaten by lizards and birds that help its spread.
- Coastal plant and can cope with harsh, salty, exposed conditions.
- Leaves - succulent, store water and covered with 'glistening' cells that help to reflect the light and therefore reduce transpiration, protect them from the sun.
- Spreading, scrambling plant that often forms dense mat over shrubs and provides shelter and protection for little birds and their nests.

## **Shrubs**

### **Correa reflexa – medium**

- attracts honeyeaters with long slender, curved beaks that can get down their tubular flowers for the nectar. They then help pollinate as move from flower to flower.
- Attracts Eastern Spinebill, at this time of year.
- Seeds are also often eaten by birds.
- Flowers twice a year – spring & autumn

### **Bursaria spinosa (Sweet Bursaria) – large shrub/small tree**

- Burser's purse - called as seeds like little purse containing money.
- Attracts butterflies (feed on nectar from flowers). The massed white blossom attracts insects and therefore insect-eating birds. Also the fruits/seeds are eaten too. It's prickly thorns also provide protection for birds who will nest in thickets of Bursaria.

### **Melaleuca ericafolia (Swamp Paperbark) – large shrub/small tree**

- grow in moist soils
- provide shelter for Ringtail possums that make their nests/drays in them
- flowers provide nectar for honeyeaters
- papery bark used for nesting material by birds and possums.
- Eastern Yellow Robin will often nest in a thicket of the scrub.

### **Trees - General comments**

- In Australia where the sun is very hot and there is less water, Gum Trees and many other trees have leaves that hang down so they expose less of their leaf surface to the sun, so stay cooler, therefore require less water. (Broad, horizontal leaves warm up more like when you lie flat on the sand at the beach.)
- Take at least 60+ years to form hollows so native birds can nest in them eg parrots or possums can make their homes in them.
- Provide shade from our hot summer sun for animals and plants.
- Shade the water of creeks and streams so keeps cool for our native fish.
- The falling leaves and twigs also rot down and provide a natural food for insects that some birds and animals eat eg Robins & Wrens.
- Also form a protective mulch over the ground which keeps in the moisture and protects smaller herbs and wildflowers.
- Also allow fungus and lichens etc to grow - form part of **food chain**.

### **Eucalyptus pryoriana (Manna Gum) – 'Koala Gum'**

- Aborigines - used the wood for shields and containers for holding water (made from the 'burls'(swellings on trunks).
- Produce 'manna', a sticky sticky gum - formed where holes have been bored by insects. Aborigines liked to eat it
- Attract honeyeaters eg Little Wattlebird, Red Wattlebird, White-plumed Honeyeaters.
- Principle food for Koalas and important food source for possums, particularly new shoots.
- Have adapted to our climate and conditions eg
  - have narrow hanging down leaves so don't get as hot, don't transpire as much therefore don't need as much water
  - often see dead branches - reduces surface area and also drop down on ground and provide shelter and food for animals eg lizards and insects on which birds feed.

### **Allocuarina verticillata (Drooping or Coast Sheoke)**

- Aborigines - young shots and cones were sometimes eaten, but the wood was mainly used for boomerangs and other implements.
- Good burning wood, hot (used in bakers' ovens etc in 'early days'). Therefore decimated in early 1800s. Slow burning and don't catch fire easily and don't produce embers, therefore not a threat re bushfires

- Fix nitrogen in soil
- Wind pollinated
- Seeds like little windmills
- Rough fissured bark provides camouflage and homes for small lizards
- Has no leaves. The so-called 'leaves' (the long hanging needles) are actually stems so they lose even less water.
- Can regenerate in 70% – 80% shade, whereas eucalypts need 90% - 100%. Therefore unless an area is burnt or cleared Sheokes will dominate.

## General Notes

### Reasons for planting indigenous (local natives)

- Provide habitat for native fauna (local wildlife) ie food and shelter
- They regenerate naturally, saving time and money
- They have adapted too local conditions and micro climate and so have higher survival rate than exotic(introduced) plants eg don't need as much water, good in droughts
- The birds, bats and sugar gliders attracted to your garden will provide natural pest control. Eg the big Black Cockatoos dig into the tough rough bark of the Banksias and eat the grubs that can kill the trees

Need a range of plants in an area. Plants form different storeys or layers eg groundcovers - grasses or shrubs that creep along the ground, middle layer – shrubs, upper layer or top storey – trees.

We can plant natural corridors along creeks and rivers, fences, roadsides so animals can move along them to find more food and mates.

### Rocks & Logs

- Provide shelter for insects, reptiles
- When rot down provide food for insects

Ants take the seeds underground

Australian plants and animals have developed a remarkable inter-dependence eg with our native birds

- Some flowers provide nectar for honeyeaters and lorikeets who help in turn to pollinate them. They brush up against the pollen while feeding and it gets on their heads, feathers, legs etc. They then carry it from flower to flower, cross-pollinating as they go.
- Some honeyeaters' beaks are long, slender and curved having evolved so they can probe into long tubular flowers like the correa, banksias. Some are shorter for feeding on more open flowers.
- They also have a brush-tipped tongue to lick up the nectar from the honey blossom.
- The plants on which they feed have developed their shape and nectary in association with the honeyeaters' needs.
- They also have strong legs to 'perform gymnastics', twisting and hanging upside down as they get nectar from the blossom.

- Parrots and cockatoos live in hollows of stumps or trees.
- Cockatoos have very strong specialized beaks (like Yellow-tailed Black Cockatoos they are large and chisel-like for feeding on the hard fruits and seeds of casuarinas, banksias, hakeas and eucalypts. They crack the outer shells and use their special shaped beak to extract the seed. They help scatter seed for germination.
- Birds attracted to succulent fruit help to spread seeds when they defecate.
- Many trees have papery bark that is used by some birds for nesting material.
- Some plants have spines or needle-like leaves that help protect the nests from prey.
- Australian birds have are of many different colours and textures, and many of these ensure protective camouflage, they blend with their environment. Australian birds coincides with that peak flowering or fruiting season so they can feed quickly with time to look after their young.

## **Weeds**

### **Rubus fruticosus (Blackberry)**

- Weed – scrambling , very prickly shrub
- Weed of National Significance (WONS)
- Fruit eaten and spread easily by birds and foxes etc.
- Invades native vegetation and riparian (and coastal) zones as well as agricultural land.
- Requires specific herbicide – need Chemical Users License.
- Covers/grows over other plants.
- Makes access for animals and man very difficult (and painful!)
- \*However may be used by some indigenous species eg Superb Blue Wrens when no other similar vegetation is available for them to nest in safely ie protection from predators.
- Therefore care must be taken when removing it until alternative indigenous species are planted eg. Bursaria, Prickly Wattle, Hedge Wattle

### **Agapanthus africanus (Agapanthus)**

- Weed/garden plant – attractive, summer flowering, lush green, strappy foliage.
- South Africa
- Very hardy
- Grows in any soil, in any conditions
- spreads vegetatively and by seeds
- can't be killed by common herbicide ie Round-up
- thick fleshy roots
- out competes other plants taking their space, water and nutrients.

### **Pittosporum undulatum (Sweet Pittosporum/Victorian Box)**

- Aust native tree – Indigenous to East Vic (Gippsland), NSW, Qld.
- Weed – serious elsewhere
- Hardy – flourishes in a wide variety of conditions.
- Out-competes other plants by: - dense canopy reducing light, takes nutrients and water, seeds germinate readily.
- Seeds spread by birds