TOP DRAW

DRAWING AUSSIE FLORA

lino prints by Patrick Clarke, Jarrod Koch, Katie Jayne O'Brien, Zac Elliot and Sadie Grant Butler

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Lino print by Lauren Kennedy

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The mission of the Australian National Botanic Gardens is to grow, study and promote Australian plants.

Botanical Drawing — What is it?

- This is a form of art where the artist draws a plant exactly as it looks. Botanical drawing combines art and science in a useful and beautiful way.
- Carl von Linnaeus was a botanist who lived and worked in the 18th century. He noticed differences and similarities between plants. Through his observations he invented a new way of naming and classifying plants into groups.
- Explorers like Captain Cook used to take naturalists and artists on their voyages and these people discovered and drew new species of plants. Botany Bay in NSW was so named because of the great number of new plant species found there.
- Today botanical artists are still recording newly discovered species like the Wollemi Pine, but they also paint and draw to celebrate the beauty and variety of plants in our natural environment.
- Drawing plants is often a better way to record them than photography because through drawing it is possible to highlight on a single page important features as well as to show different stages of development.

studies of Wax Flowers by Tess Bartels, Jayne Marsh, Briohny Gillespie and Cassie Gilmour

Observing a plant specimen

1 Pick a specimen that has both flowers and leaves. Note where it was growing: ... in a sunny spot? ... with other plants? ... in a well-watered spot?

2 Look at the specimen very closely using a magnifying lens. Look at the way it grows, the petals and inside the flower, the leaf shape and arrangements, the stem, the back, the tip...

3 Pull it apart carefully, leaf-by-leaf, petal-by-petal. Look at the shapes of the leaves, their veins and margins. Take the flower apart and count the sepals and petals. Look at the flower parts and a leaf and a piece of stem through a hand lens or a microscope if you have one. Can you see the stamens and ovary with style and stigma? (See page 9.)

4 Be an explorer and discover things about it as though you were the first person ever to have seen it.

drawing of Grevillea species by Irene Gillespie

What you need for Botanical Drawing:

Necessary:
- a sharp 'B' pencil or a mapping pen and black ink or a fine, felt tip pen
- A4 cartridge paper — copying paper will do
- a botanical specimen — pick it from your garden, not from the bush!
- ...and a hand, a brain and at least one eye!

Optional (but helps with the detail):
- a magnifying lens
- a craft knife

Drawing tips for beginners and teachers

Fix the specimen in the position for drawing. You can use a vase or plasticine or you can lay it down on a piece of plain paper above your drawing paper. Study it closely for a few minutes using a magnifying lens.

Decide which way you want your drawing paper to be, 'portrait' or 'landscape'. Which way better suits what you want to draw?

Choose a starting point ...the bottom of the stem? ...the centre of a flower? Don't think about the whole plant. Just concentrate on one small area.

Start drawing with a *light* pencil stroke. Where the plant gets darker, use a stronger pencil line. Pay particular attention to shapes (how do the petals overlap?), edges and joins.

For example, it's best not to use a single line to draw a stem. After all, what is a stem for? The stem transports all the food to the plant. Imagine it as a group of pipes, with several different functions. For example, it also holds the plant in the air!

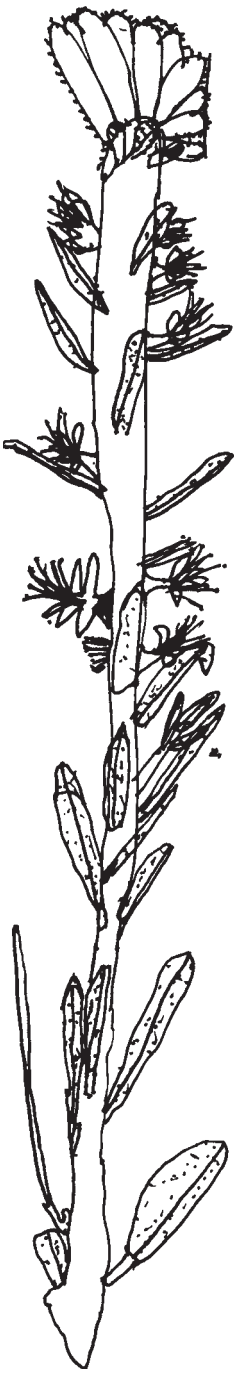
Make the plant *grow slowly* (after all, it has taken weeks to get to the size it is now). Keep building and checking how the plant is put together. It is best to keep looking and checking every few minutes. *Look, check and think one step ahead* to see where you are going.

If things go wrong, go back. Look and find the mistake and change it.

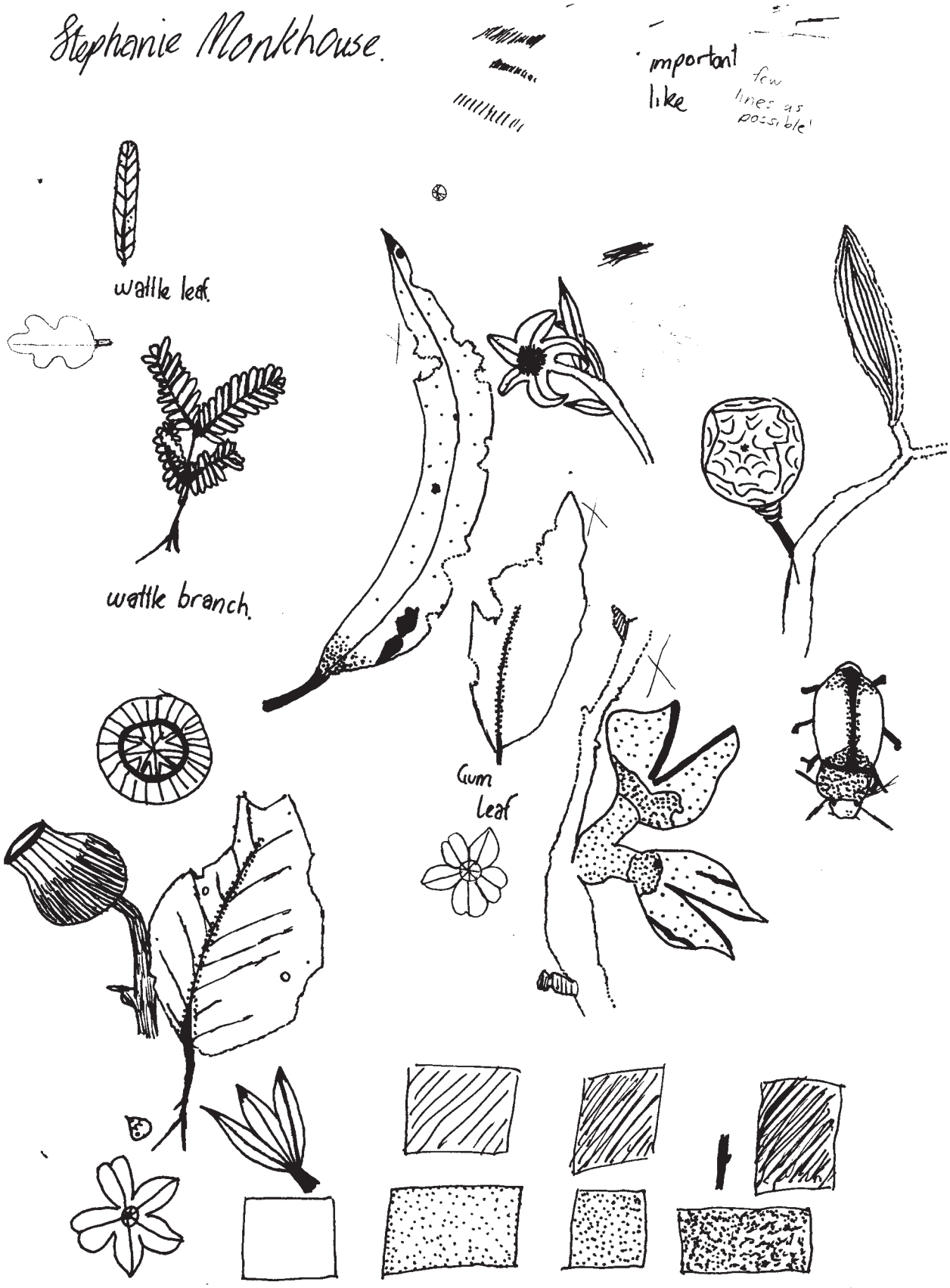
You need to spend at least 30 minutes drawing a whole specimen.

If the drawing is not perfect, then thank goodness you are human after all! If it is perfect then you are kidding yourself! Remember, what is important about the drawing is what you learned and if you spent at least 25 minutes on it and did your best, your Aunty Agatha will love it.

The famous botanical artist of Australian flora, Ferdinand Bauer, drew nearly every day of his adult life. Find a book in the library on botanical drawing and see how professional botanical artists drew.



drawing by Patrick Clarke



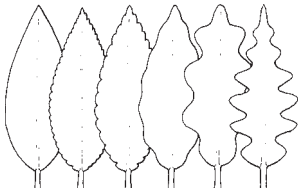
drawings by Stephanie Monkhouse

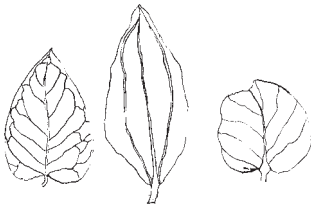
Plant parts

Leaves

Like humans, plants have a common structure. With few exceptions, flowering plants have roots, stems, leaves, flowers and fruits. But these parts of a plant differ between species and it is these *differences* that botanists use to identify the plant species. The botanical artist needs to be able to spot and draw these important differences.

Leaves, for instance, can have many different characteristics. Here are some of them. Can you spot the difference in each group?

1  These have different _____

2  These have different _____

3  These have different _____

4  These have different _____

5  These have different _____

Clarke and Lee (1987) pp 45 and 47

Something to draw

Find your own five leaves that show some differences. Draw them, looking carefully to see how many differences you can find. The Australian family Proteaceae has extraordinary diversity of its leaf forms!

Did you know that the South African Proteas are related to Australian Banksias?

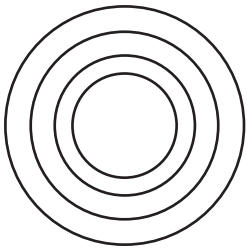
drawings
Callistemon species by Katie Jayne O'Brien
South African Protea species by Jayne Marsh
Grevillea species by Emma Black

Flowers

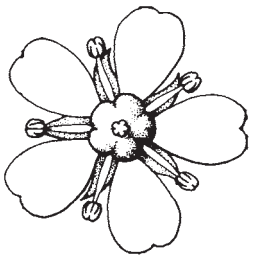
Flowers are more complicated than leaves. They all have several different parts such as sepals, petals, stamens and an ovary with style and stigma.

Something to draw

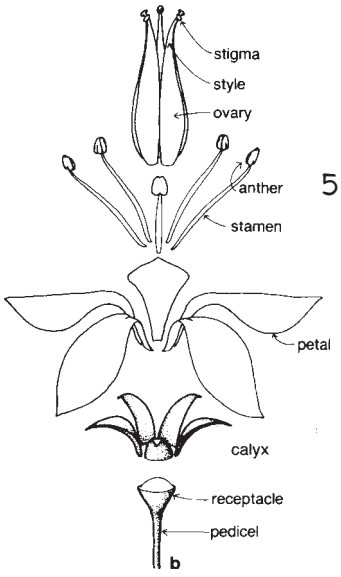
1 Find two flowers from the same plant, preferably a plant with a big but simple flower that is easier to observe than a tiny, complicated one.



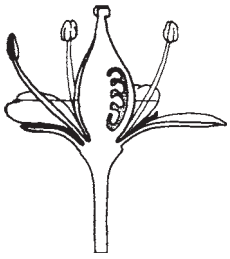
2 Look at one of these flowers from all sides:
How are the petals arranged?
Can you see inside the flower? What can you see?
Look at the way the flower joins the stem. What can you see?
Does the flower have a lump on the bottom? Are there some other petal-like shapes here?



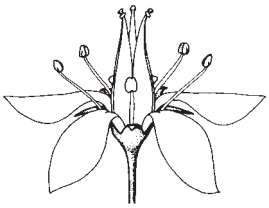
3 Look at this stylised drawing of a simple flower:
The middle bit is the female reproductive part that eventually produces the fruit.
Outside that are the male bits, the stamens with their filaments andanthers.
Then come the petals. These protect the male and female parts and attract pollinators like bees.
Then there are the sepals which protect the lot, especially when it is a bud waiting to flower.

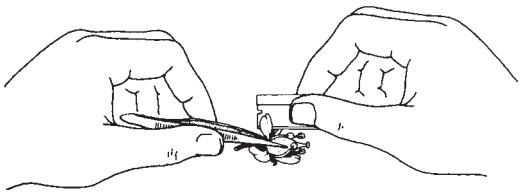


4 Now take this flower and carefully pull it apart. Lay all the parts carefully on a piece of paper. How many different parts have you found?
Draw these parts and name them.



5 Take the other flower and very carefully (and with supervision!) cut this flower in half, lengthways, with a craft knife.
Look at how all the part join together.
Draw one half of the flower.

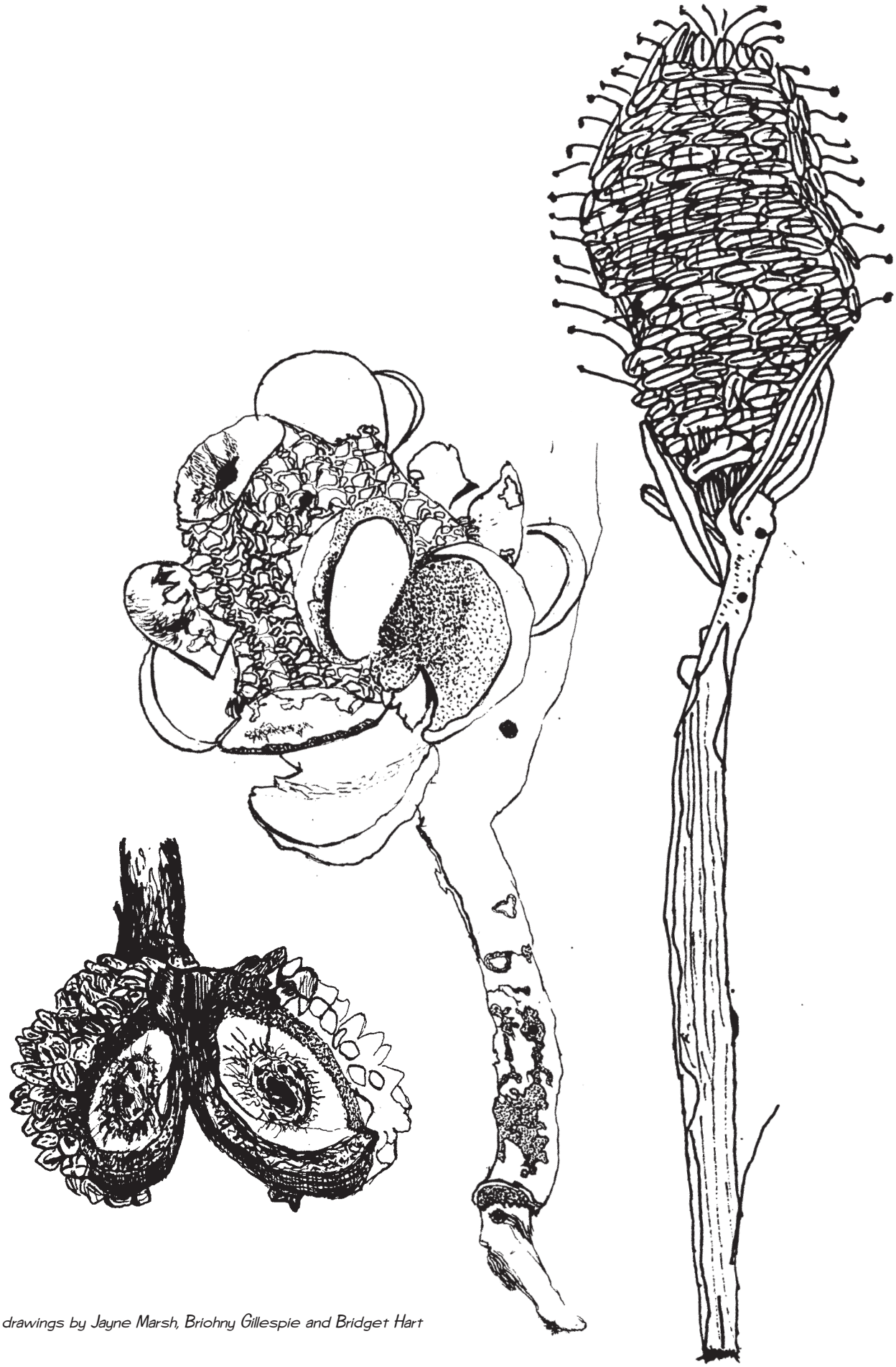




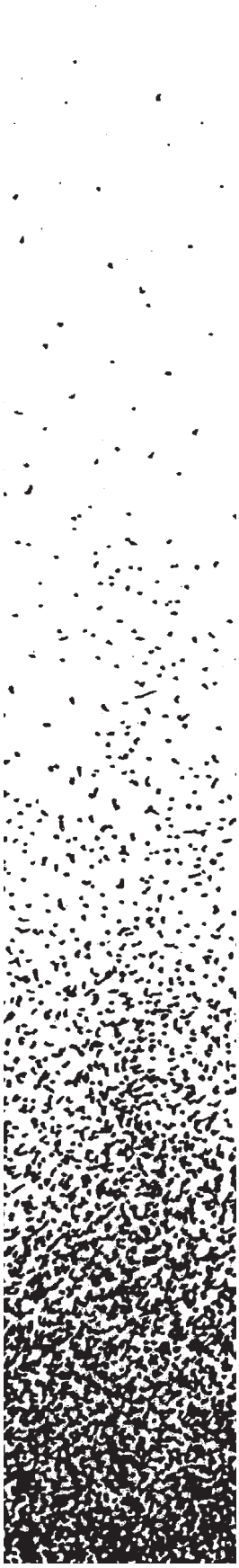
Clarke and Lee (1987) pp 7 and 59

Something to do

Make your own model flower making sure it includes all the main parts. You could use paper, fabric, wire, thread and glue ...or plasticine ...or felt.



drawings by Jayne Marsh, Briohny Gillespie and Bridget Hart



Fruits

After the flowers come the fruits. Such things as birds, wind or insects spread the pollen between flowers. Fertilisation may then occur, leading to fruit development. The fruit is the ripe ovary of the flower. The fruit contains the seeds that will germinate to make a new plant if the conditions are right.

Some fruits like apples and tomatoes are edible. Sometimes we eat the seeds of fruits, like peas and macadamia nuts.

Drawing fruits with felt tip pen

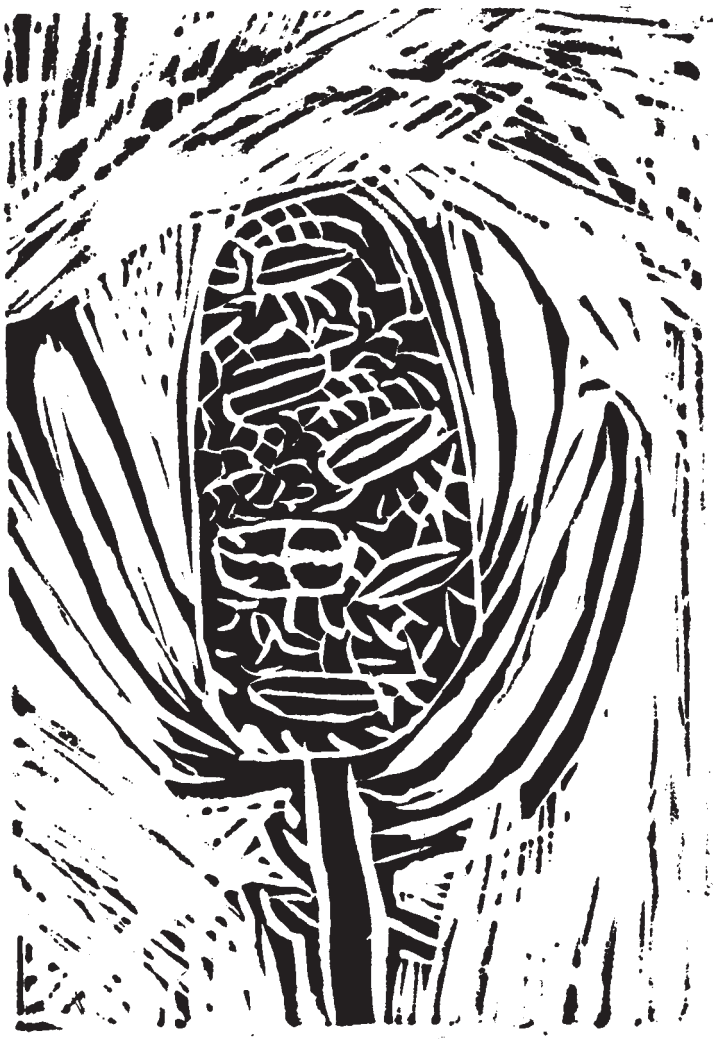
Unlike flat leaves, fruits are generally three-dimensional. It helps to know about how to get this effect when drawing them. Shading is one of the best ways.

Shading shows where something is darker. Something can be darker because the colour is darker, like the difference between navy blue and yellow, or because the light does not get to a part of it and we see shadows.

Botanical drawings are usually drawn in ink because this makes the drawing easier to reproduce in print (see printmaking extension activity on the ANBG education website). Try using a fine felt tip pen for these drawings. Shading with a felt tip pen is different from a pencil because the pen will not make dark and light lines.

One of the techniques the botanical artist uses is called stippling. This is done using lots of small dots. The more dots, the darker the shading; the fewer dots the lighter the shading.

drawings by William Hall and Briohny Gillespie



lino print by Matthew Hanniford

Something to draw

Look at these drawings that other students have done. Where have they used stippling?

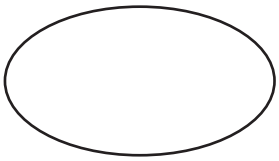
Use a fine felt tip pen and stippling to shade these boxes:

very pale | medium light | medium dark | almost black

Think about some different marks you could use shade in these effects:

diagonal | curvy | spiky | furry | scribbly

Try shading this egg shape starting dark then going very light.



Look at a lemon. Put it on a white piece of paper. Can you see its shadow on the paper? Can you see that it is darker in some places? Squint your eyes to make this clearer. Look at the surface of the lemon. It is slightly pitted and looks textured. This is because the light is casting tiny shadows on its 'lunar landscape'.

Draw the lemon. Look for different shades — very pale, medium, light medium, dark and almost black. Leave the extra light bits white. Which way will you shade to show the roundness of the lemon? .....and then cut it in half and count the segments. What's it like cut in half the other way?

Make a collection of Australian native fruits. They are really fun to draw. (Australian fruit are available in our Loans Kit. Contact Education Services for Details — see page 14.)

Drawing on location

This activity can be done at home and at school.

It can also be done at the Australian National Botanic Gardens.

Contact Education Services to find out how:
www.anbg.gov.au/education

> At its best, drawing outside can be a private moment, a contemplative moment, an escape and a time of discovery. We can enable children to experience some of these by encouraging them to be comfortable with their bodies and minds and, for a few moments at least, forget their troubles and the busy world by letting the natural environment envelop them. The process of drawing can concentrate the experience; the drawing itself becomes the memory of that moment.

Practice and tools for beginners

Preparation

This is really easy if you intend doing this program at the Gardens! You can use our kit of materials amd plant resources.

students
hats and sunscreen
layers of clothing

materials
view finders
fine felt-tip pens
A4 clipboards
A4 paper

Finding a place to draw

Before starting to draw, check that students are comfortable, away from others and that they can see what they have selected to draw. This is a very important step to success!

Students should select their own positions:

- They should be able to see the teacher; this is no time for hide-and-seek!
- They should be comfortable in the position they have chosen; not kneeling, not squatting and not twisted or cross-legged. Remember that the position needs to be maintained for at least ½ an hour to achieve maximum concentration.
- Take the weather conditions into account. Students should not sit in the sun unless very well protected. Being too hot or too cold soon erodes concentration.
- They should sit at least 2m away from any other person and preferably not near a mate.
- They should face what they want to draw directly. This seems obvious, but doesn't always happen!
- Finally, it is more important to be comfortable than to be determined to draw something that will cause you discomfort. Leave that for the advanced course.

Choosing what to draw

- something that can be seen clearly
- something relevant
- a leaf? a branch? a shrub? a flower?

A viewfinder can help to decide what to draw. It can be used like a camera to look at a number of options before deciding on one.

Drawing with a fine felt-tip pen

- Why?
- It doesn't need sharpening.
- You won't need an eraser.
- You will get a result, which you might not if you use pencil and an eraser!
- You can photocopy this result. Botanical drawings are commonly in black and white for easy reproduction.

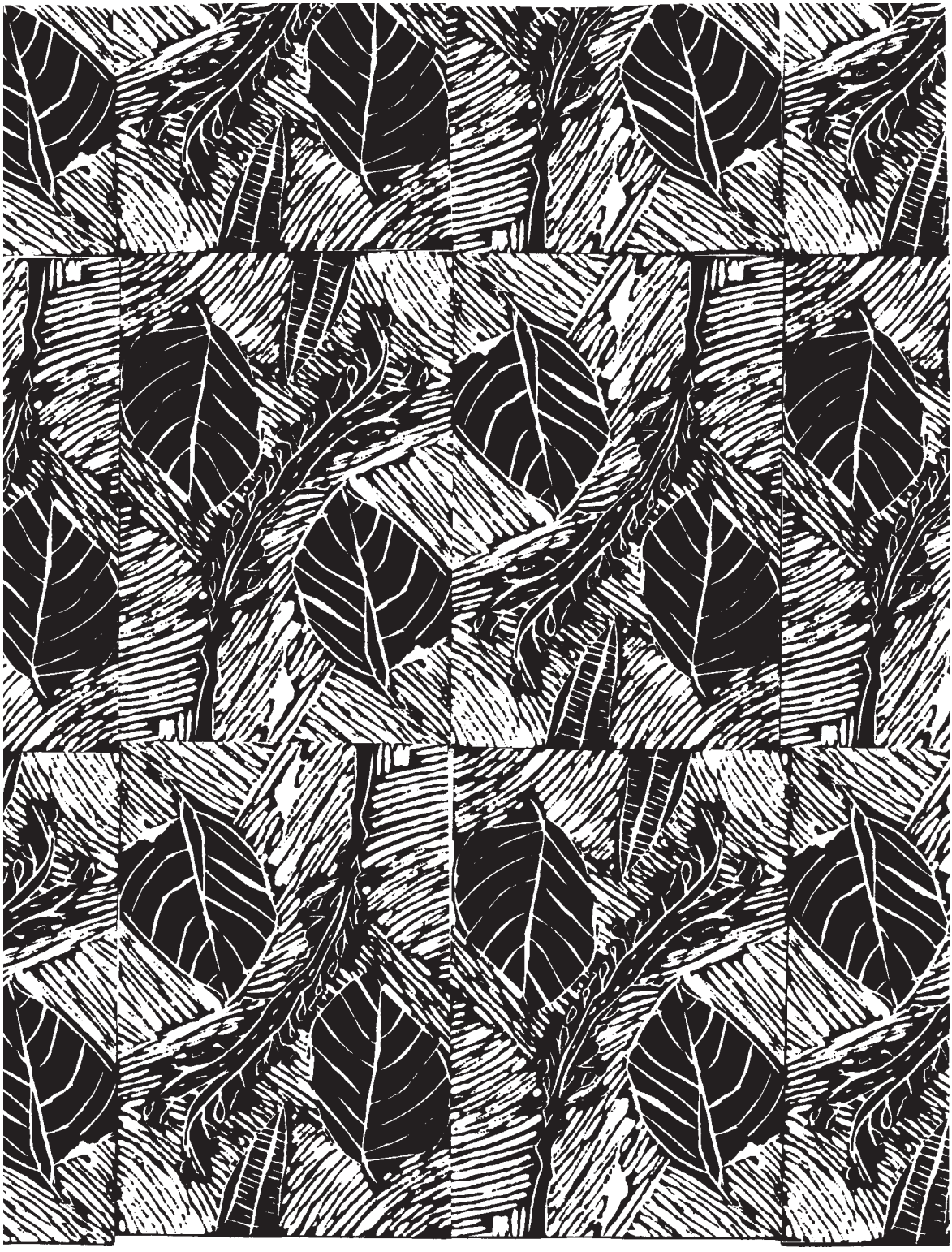
How?
Make sure the students understand about how stippling can be used to describe texture and tone.

If a mistake happens, and it will, ignore it, correct it or turn it into another part of the drawing.

Observe, observe, observe. It is not what the drawing looks like that matters. It is what has been seen and learnt that is important.

Start from the central point or maybe a leaf and let the drawing grow — just like a plant.

Start with a few dots. Move on to line when more confident. Wish and hope. Don't expect!



lino print by Jack Raynolds (and Michael Bourke)

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