Collecting Data, Caring for the Land

One way we can care for the land and waterways is by taking measurements. The data we collect helps us understand the health of our environment, track changes in it and identify problems. It also helps us make better decisions about how to protect and preserve it.

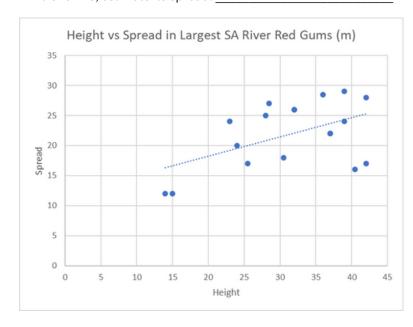
Yukis are often made from the bark of River Red Gums. These trees have the right moisture content and sap production to allow the bark to release easily during the cutting process.

Look at the table labelled '22 Largest River Red Gums in South Australia'.

- 1. Which tree is the shortest?
- 2. What is its spread? ____
- 3. Which tree has the smallest circumference?
- 4. What is its height?
- 5. Calculate the diameter of 'Sheepy'. (D = C/π)
- 6. What is the range in tree spread in this data set? (Highest value minus the lowest value)

Look at the scatter chart below comparing the height and spread of the trees in the table.

- 1. The data points for 'Old Emu Foot', 'Cazneaux Tree' and the NW side of Mullinger swamp tree have not been plotted yet. Plot them on the chart, using a ruler to help line them up.
- 2. A trend line has been added to show the basic relationship between tree height and spread. Complete the following sentence: As the tree height increases, tree spread
- 3. Another large river red gum has been discovered. Preliminary measurements suggest that it is 41 metres tall. Based on the trend line, estimate its spread.



22 Largest River Red Gums in South Australia

Tree Name (if known) and location	Circumference (m)	Height (m)	Spread (m)
'Charleston Tree', Charleston	11.98	42	28
Wilpena Creek, Wilpena Pound	7.43	42	17
Walnut Paddock, Belair	7.88	40.5	16
'Big Red', Mullinger Swamp	12.04	39	29
Melrose, Flinders Ranges	9.16	39	24
NW side of Mullinger Swamp	9.32	38	33.5
'Hughes Park Tree', Watervale	13.19	37	22
Rosedale Rd, Sandy Creek	7.57	37	22
Federation Park, Gumeracha	9.33	36	28.5
'Old Emu Foot', Melrose	14.27	35	30.5
'Sheepy', Beautiful Valley Creek	14	32	26
Wirra Wirra rd, Mt Crawford	10.4	32	26
'Big Tree', Kensington Gardens	8.45	30.5	18
'Cazneaux Tree', Wilpena	11.4	29	17
Bald Hills Rd, Mt Barker	9.58	28.5	27
Mambray Creek campground, Mambray Creek	13.92	28	25
'Big Gum Tree', Forreston	13.31	25.5	17
Brewery st, Melrose	9.29	24	20
'Giant Gum', Orroroo	9.9	23	24
'Monarch of the Glen', Brownhill Creek	13.54	15	12
'Herbig Tree', Springton	15.28	14	12



